FACTORS CONTRIBUTING TO THE ABANDONMENT OF SCHOOL BUILDINGS

By

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CHAPTER I

INTRODUCTION

Where the Florida Keys curve westward toward the Gulf of Mexico, the shuttered windows of the former Matecumbe and Tavernier Schools, a few miles apart, overlook the Gulf Stream, their classrooms vacant after little more than a decade of use. Not far from the Perdido River, at the opposite extreme of Florida's great length, two four-room brick school buildings, one built in 1939 and the other in 1915 (but described as still structurally sound) stand empty and silent. Scattered the length of Florida between these geographical extremes are many other schools abandoned or only partly filled after being used a small portion of their structural life. The red clay hills of old Middle Florida are dotted with neat, well-built, one-room and two-room frame buildings constructed for Negro schools under the relief programs of the nineteen-thirties, but now partially or completely unused. Near the shores of the Suwannee River a handful of children attended school last year in a five-room masonry building for which the land-owners of the district are still paying high taxes for bonds; this building was completely abandoned when a new school building was constructed at a location a few miles away. In the citrus and tourist belts of Florida are tile-roofed, stuccoed masonry school buildings constructed during the boom of the nineteen-twenties, of which some of the rooms have never been occupied by classes of children. The vacant windows of two-story brick school buildings loom over the improved pastures of South Florida's cattle country, and among the reforested woodlands of North Florida a single teacher holds school in a six-room brick building not two decades old.

Abandoned school buildings are not peculiar to villages and rural areas. Flourishing cities, struggling to meet the demands of a rapidly increasing urban population, have their partly filled school buildings and abandoned classrooms at the same time that the school authorities are desperately attempting to provide new space in other locations for a fast growing school enrollment. In more than one Florida city in recent years school buses have driven through heavy downtown traffic twice daily to haul children to unused classrooms in some school buildings and give relief to over crowded rooms in other schools. Dade County, now engaged in a multi-million dollar school building program, closed and abandoned a five-room masonry school building in Miami within the last two years. The Dade County school administration offices in Miami are housed in a former high school building. Likewise, the Duval County superintendent's office in Jacksonville occupies a high school building constructed in 1907 and abandoned within twenty years, except for partial use as a school administration building. A large abandoned school building near downtown Tampa served for many years as a county office building and has just recently been demolished to make way for a new courthouse. In a rapidly growing city of thirty thousand population school authorities and citizens can see no way to provide the kind of high school program they want for the youth of the community, other than to abandon a good building constructed only a quarter of a century ago and build another high school plant at another location.

Florida is one of the most rapidly growing states. Census reports show an increase in population of 46 per cent between 1940 and 1950. From 1920 to 1950 population grew from 968,470 to 2,771,305, or 186.2 per cent.[1] In spite of the growth in population the number of school centers in operation in Florida has been steadily decreasing in recent years. Table I shows there has been a net decrease in the number of school centers each year since 1938-39, ranging from 17 in 1944-45 to 97 in 1949-50. The rate of net decrease in the last three years is approximately 5 per cent. The actual number of discontinued school centers does not appear from this table, since closed schools are offset in some years by newly opened schools. Each closed school represents a building of some sort abandoned for school purposes. In addition there were some buildings abandoned and replaced at school centers which were not discontinued.

These examples from Florida illustrate a situation which to a greater or less degree exists throughout the United States. Similar cases can be pointed out in every part of the nation. Nationwide the number of schools in operation has been decreasing steadily for quite a number of years.[2]

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[1] John M. Maclachlan, "Florida's Population, 1920-1950," Civic Information Series, No. 11, University of Florida, Gainesville, p. 2, Table I.

[2] Howard A. Dawson, "Trends in School District Reorganization," The Phi Delta Kappan. XXXII (March, 1951), pp. 302-307.

TABLE I

NUMBER OF SCHOOL CENTERS IN FLORIDA BY YEARS 1936-37 to 1950-51[a]

Year	Race		Total	Yearly Net Change in Number[b]
	White	Negro		
1936-37	1163	982	2145	
1937-38	1113	975	2088	- 57
1938-39	1140	987	2127	+ 39
1939-40	1098	968	2066	- 61
1940-41	1073	958	2031	- 35
1941-42	1033	913	1946	- 85
1942-43	1006	883	1889	- 57
1943-44	971	863	1834	- 55
1944-45	972	845	1817	- 17
1945-46	942	839	1781	- 36
1946-47	931	808	1739	- 42
1947-48	917	779	1696	- 43
1948-49	904	701	1605	- 91
1949-50	875	633	1508	- 97
1950-51	871	563	1434	- 74

[a] Source: Division of Administration and Finance, Florida State Department of Education.

[b] Newly established school centers offset some of the discontinued schools.

There is abundant evidence which indicates that a large proportion of abandoned school buildings are still sound in structure and have been used only a small part of the structural life of the building. There seems to be no way of determining how long a school building constructed by standard methods and without excessive expense will last with reasonable care and maintenance. Examples can be pointed out which suggest that a school building can have an indefinite period of life and usefulness. The main high school building at Monticello, Florida, a brick structure, was built in 1852, and is entering its second century with many more years of use as a school ahead of it. Even a wood-frame building may have a long life if protected from fire and properly maintained. After half a century of use, the three-room frame Florahome school building in Putnam County, Florida, is described in a school building survey report as "a very good structure even though it was erected in the nineteenth century."[3] A frame building constructed in 1885 at Rochelle, Alachua County, was used for school purposes for forty-nine years until abandoned in 1934; it still stands in remarkably good condition in spite of eighteen years of neglect. The abandoned Tavernier and Matecumbe Schools on the Florida Keys, constructed of concrete and reenforced against possible hurricane winds will, unless torn down, doubtless stand for at least two or three hundred years. To expect that a school building of reasonably good quality of construction and properly maintained will stand for a hundred years is to be very conservative on the basis of the examples just cited.

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[3] Proposed School Plant Program for Putnam County, Florida, 1949, p. 20.

Many of the buildings which have been abandoned for school use, or will be abandoned in the next few years, are as good or better structures than some of the new school buildings now being built, and some of these abandoned buildings are just as well suited to a modern educational program as most of the older buildings continued in use and even some of the newly constructed buildings.

School buildings represent a very large investment of public funds. According to the Biennial Report of the State Superintendent of Public Instruction, the original cost of school property in Florida was estimated at $145,398,167 in 1949-50.[4] This figure is probably rather conservative, and many millions of dollars have been spent for school buildings in Florida since. The investment in school plants in Florida in terms of actual dollars spent on school buildings is probably impossible to determine with any degree of exactness even by the most painstaking and laborious research. Original costs of many school buildings and subsequent capital improvements are buried in the ill-kept and poorly preserved records of county superintendents' offices extending over a century, and in the closed files of the Works Progress Administration and other relief agencies of the nineteen-thirties.

Even if the actual investments in school buildings in terms of dollars were known, they would probably be relatively meaningless now in view of the changing costs of building over a period of a hundred years and of the declining value of the dollar since World War II. A more meaningful figure to illustrate the large investment of funds necessary to provide school plants can be derived from a calculation such as this: New school plants of masonry construction are estimated on the basis of actual contracts let in Florida in the latter months of 1951 and the early months of 1952 to cost about $31,000 per classroom, including the costs of auditoriums, lunchrooms, libraries, laboratories, gymnasiums, and other facilities, as well as site and equipment.[5] (This estimated figure is somewhat less than recently estimated nationwide average cost per classroom).[6] If each classroom houses thirty pupils, a cost of $31,000 per classroom would represent an investment of $1033 per pupil. At this rate school buildings adequately to house and provide instructional facilities for the approximately 500,000 pupils now in Florida schools would represent a value of $516,500,000 in terms of present day costs.

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[4] Biennial Report of the State Superintendent of Public Instruction, 1948-1950, p. 249.

A considerable part of the public debt of Florida and other states was incurred to build school buildings. At some times and in some places this school indebtedness has been very burdensome. Discussing the burden at one time of Florida school indebtedness (incurred mostly to construct school buildings) Copeland points out that:

> While the school debt at the onset of the depression was only slightly more than one-third of the road and bridge debt, it was still an impressive figure. . . . Indebtedness hung like a dead weight on the current economy. . . . School bonds were sold at a fraction of their original worth by scared investors. Speculators bought up these bonds and filed suit to enforce full payment of principal and interest. Their claims were held valid by the courts. . . .[7]

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[5] Letter from Forrest M. Kelley, Jr., State School Architect, April 8, 1952.

[6] Ray L. Hamon, "How Many Classrooms Do We Need?" School Life, Vol. 34, No. 2 (November, 1951), p. 17.

[7] R. W. Copeland, "Public School Indebtedness in Florida." Unpublished Doctor's dissertation, University of Florida, 1951, p. 58.

He goes on to give figures for 1934 showing in the case of Florida's special tax school districts that:

> . . . . Sixty-three per cent of the outstanding indebtedness was then in default. The amount of county bonds and time warrants including interest in default amounted to more than one-third of the indebtedness outstanding. Total indebtedness, county and district, in default ($6,459,026) amounted to 11.6 percent of the total outstanding ($56,049,265).[8]

The effect of the heavy burden of school indebtedness on the operation of the schools in some cases is indicated by Copeland's statement:

> In one county the indebtedness had been so great it could not be retired without destroying the school program. When the situation was analyzed and the facts presented to the creditors, most of them agreed upon a plan for the board to pay what it could . . . .[9]

The situation described by Copeland in Florida in the nineteen-thirties is, perhaps, an extreme case resulting from the Florida boom of the nineteen-twenties followed by the nation-wide depression. However, it illustrates the fact that indebtedness incurred for school buildings is a burden on the taxpayer and a drain on available school revenues, whether it be to a greater or less degree.

Part of this burden of indebtedness is likely to be for payment for buildings which are used only a small part of their possible structural life. The longer a school plant is continued in use the greater is the return from the capital investment. The necessity of abandoning a school plant long before the building is worn out results in the loss of a large part of the capital investment, since school buildings seem in most cases to have relatively little salvage or resale value. If it were not necessary to abandon school buildings before they are worn out physically, much greater return would be realized on the capital investment with resulting lighter burden on revenues available for school purposes. The use of school buildings over a longer period of time would conserve the public's investment and would lessen the burden on the taxpayer, or make more money available for the current operation of the schools.

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[8] _Ibid._, pp. 59-60.

[9] _Ibid._, p. 61.

The problem of abandoned school buildings and unused classrooms was recognized in the report of the Florida Citizens' Committee on Education in 1947, in the following words:

> Unused classrooms represent unused capital and indicate either an unexpected shift in population trends, inadequate planning, or a situation which has resulted from an archaic district organization. In many cases the unused classrooms will remain permanently unoccupied and the capital investment represented by these vacant classrooms will be permanently vacated. The need for additional classrooms is so generally distributed throughout the state, and the acute overcrowding in some places is so pronounced, that the unused classroom is particularly significant at this time.
>
> . . . .
>
> Data supplied by the county superintendents of Florida indicate there are more than 500 unused classrooms for whites and in excess of 100 unused classrooms for Negroes within the state. If we assume that these unused classrooms represent at least as much capital outlay as the average classroom of the state, this vacant property represents an investment of $4,299,700 of public money from which the educational interests of the state are receiving no return. . . .[10]

Florida, like many other states, has in the last half dozen years embarked upon a school building program which exceeds that of any other period of its history. The long period of little school construction resulting from the depression and the years of war-time shortages of labor and materials left a large deficit in school buildings, which has been accentuated by the rapid growth in school population resulting from high war-time and post war-time birth rates. County school systems report the expenditure of $59,839,000 for school buildings in the last three years.[11] Even more extensive building is in prospect. School building surveys made in all the county school systems of Florida from 1946 to 1949 indicated state-wide school building needs amounting to $140,654,695, as shown in Table II. As the survey reports pointed out repeatedly, these needs were computed very conservatively, were often trimmed to meet the financing capacity of the county, and in most cases did not anticipate the rapid growth in school population which some of the counties have experienced.[12]

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[10] Education and the Future of Florida, p. 185.

Table III gives a summary of the results of the school facilities survey in Florida made under the provisions of Title I, Public Law 815, 81st Congress. This survey attempted to estimate school building and other capital outlay needs for Florida schools as of March 1, 1951. Table III shows that $191,073,746 worth of new buildings and $3,957,507 worth of rehabilitating and remodeling were needed in Florida as of the date of the survey. The results of this later survey reflected the higher cost of building, the growth in school population, and probably a somewhat more generous calculation of facilities for the schools.

Figures from the federal school facilities survey for the nation as a whole were not complete at the time of the present writing, since many states had not finished their studies. However, the United States Office

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[11] From county superintendents' annual financial reports to State Department of Education. See also Tampa Morning Tribune, February 24, 1952, p. 14-A.

[12] Cf. Orange County Survey Reports of 1948 and of 1952.

TABLE II

NEEDS FOR NEW BUILDINGS AND REHABILITATION OF OLD BUILDINGS IN FLORIDA COUNTIES ESTIMATED IN SCHOOL PLANT SURVEYS MADE FROM 1946 to 1949

County	Amount	County	Amount
Alachua	$ 2,968,500	Lake	$ 2,819,860
Baker	337,100	Lee	1,663,100
Bay	1,217,800	Leon	2,165,150
Bradford	679,200	Levy	807,472
Brevard	865,120	Liberty	206,940
Broward	5,449,000	Madison	936,360
Calhoun	657,728	Manatee	2,021,300
Charlotte	87,000	Marion	2,191,400
Citrus	347,184	Martin	424,010
Clay	602,300	Monroe	467,300
Collier	389,820	Nassau	892,960
Columbia	1,157,500	Okaloosa	842,600
Dade	25,000,000[a]	Okeechobee	90,040
DeSoto	509,800	Orange	6,563,860
Dixie	254,250	Osceola	587,500
Duval	19,139,250[b]	Palm Beach	3,865,060
Escambia	4,159,030	Pasco	1,150,550
Flagler	301,536	Pinellas	5,410,000
Franklin	93,035	Polk	6,844,330
Gadsden	1,868,386	Putnam	1,201,660
Gilchrist	181,400	St. Johns	907,100
Glades	285,120	St. Lucie	1,415,640
Gulf	446,180	Santa Rosa	833,076
Hamilton	481,400	Sarasota	740,700
Hardee	909,360	Seminole	1,262,356
Hendry	518,800	Sumter	525,100
Hernando	233,560	Suwannee	1,435,750
Highlands	876,300	Taylor	693,800
Hillsborough	12,792,500	Union	371,136
Holmes	644,000	Volusia	1,424,980
Indian River	461,000	Wakulla	178,000
Jackson	2,817,490	Walton	908,476
Jefferson	1,141,600	Washington	719,660
LaFayette	215,220		
		Total	$140,654,695

[a] Estimate based partly on survey and partly on figure supplied by county superintendent's office.

[b] Estimate based on figure supplied by county superintendent's office and on 1945 survey by Reynolds, Smith, and Hills, Engineers and Architects.

TABLE III

SCHOOL BUILDING NEEDS IN FLORIDA AS OF MARCH 1, 1951, AS ESTIMATED BY FEDERAL-STATE SCHOOL FACILITIES SURVEY MADE UNDER THE PROVISIONS OF TITLE I, PUBLIC LAW 815, 81st CONGRESS

County	Rehabilitating and Remodeling	New Construction	Total
Alachua	$379,532	$ 5,085,600	$ 5,465,132
Baker	42,200	313,404	355,604
Bay	10,500	4,523,532	4,534,032
Bradford	7,400	1,642,836	1,650,236
Brevard	22,000	2,645,542	2,667,542
Broward	87,000	6,692,447	6,779,447
Calhoun	54,000	869,700	923,700
Charlotte	30,000	446,940	476,940
Citrus	4,500	1,367,496	1,371,996
Clay	6,000	757,380	763,380
Collier	2,000	202,800	204,800
Columbia	55,000	2,277,210	2,332,210
Dade	181,300	25,647,570	25,828,870
De Soto	41,200	1,360,788	1,401,988
Dixie	11,000	1,212,120	1,223,120
Duval	230,000	15,947,568	16,177,568
Escambia	135,975	6,618,066	6,754,041
Flagler	31,000	263,640	294,640
Franklin	25,000	111,540	136,540
Gadsden	11,000	3,350,958	3,361,958
Gilchrist	9,000	348,660	357,660
Glades	0	502,320	502,320
Gulf	34,000	432,120	466,120
Hamilton	13,500	863,772	877,272
Hardee	67,000	414,960	481,960
Hendry	15,800	678,600	694,400
Hernando	34,500	369,720	404,220
Highlands	0	1,691,742	1,691,742
Hillsborough	77,000	11,464,128	11,541,128
Holmes	40,000	737,880	777,880
Indian River	11,000	1,155,960	1,166,960
Jackson	77,000	4,966,962	5,043,962
Jefferson	35,000	2,149,368	2,184,368
LaFayette	20,000	160,680	180,680
Lake	35,000	3,179,124	3,214,124

TABLE III (Continued)

SCHOOL BUILDING NEEDS IN FLORIDA AS OF MARCH 1, 1951, AS ESTIMATED BY FEDERAL-STATE SCHOOL FACILITIES SURVEY MADE UNDER THE PROVISIONS OF TITLE I, PUBLIC LAW 815, 81st CONGRESS

County	Rehabilitating and Remodeling	New Construction	Total
Lee	$ 116,000	$ 359,580	$ 475,580
Leon	130,000	4,303,728	4,433,728
Levy	20,000	870,402	890,402
Liberty	0	322,608	322,608
Madison	20,000	1,383,408	1,403,408
Manatee	36,450	2,522,442	2,558,892
Marion	38,400	4,707,846	4,746,246
Martin	25,600	235,404	261,004
Monroe	0	1,096,212	1,096,212
Nassau	30,000	170,820	200,820
Okaloosa	36,000	2,095,704	2,131,704
Okeechobee	39,000	206,700	245,700
Orange	405,000	9,109,464	9,514,464
Osceola	0	481,260	481,260
Palm Beach	357,600	8,335,314	8,692,914
Pasco	97,000	2,820,948	2,917,948
Pinellas	200,000	9,481,758	9,681,758
Polk	98,000	11,089,962	11,187,962
Putnam	8,900	3,345,576	3,354,476
St. Johns	76,500	898,560	975,060
St. Lucie	80,000	2,327,832	2,407,832
Santa Rosa	18,000	752,856	770,856
Sarasota	17,000	1,945,320	1,962,320
Seminole	66,000	824,304	890,304
Sumter	49,700	1,084,668	1,134,368
Suwannee	19,300	1,960,218	1,979,518
Taylor	4,000	1,210,560	1,214,560
Union	0	752,700	752,700
Volusia	86,450	1,879,878	1,966,328
Wakulla	17,200	154,440	171,640
Walton	30,000	1,916,741	1,946,741
Washington	0	1,973,400	1,973,400
Total	$3,957,507	$191,073,746	$195,031,253

of Education in April, 1952, announced an estimate of nationwide needs for school buildings, based on a projection of the figures from eighteen states which had completed school facilities survey estimates. This "national projection" showed for rehabilitating and remodeling existing school plants, for new school construction currently needed, and for acquiring and improving land for sites a total estimated need in the nation of $9,784,000,000.[13]

These estimates of needed school facilities for Florida and for the nation as a whole are not to be taken as empty figures without possibility of realization in actual school buildings. Table IV shows that Florida's Minimum Foundation Program provides approximately $8,000,000 annually for capital outlay purposes at the rate of $400 per instruction unit (approximately 30 pupils enrolled), which amount will increase as the school population grows. In addition there are considerable amounts provided for capital outlay from the local resources of the county school systems. In the general election in November of 1952, a constitutional amendment will be submitted to the voters of Florida to enable county school authorities to borrow in anticipation of Foundation Capital Outlay revenues to build needed buildings as soon as the amendment shall become effective. If the amendment passes, county school boards will be able to borrow necessary funds to construct within the

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[13] Earl J. McGrath, "Statement of U. S. Commissioner of Education before the Subcommittee of the House Committee on Education and Labor, Thursday, April 3, 1952," p. 12. Mimeographed news release, U. S. Office of Education, Washington, D. C.

TABLE IV

AMOUNTS AVAILABLE ANNUALLY FOR CAPITAL OUTLAY IN FLORIDA COUNTIES UNDER THE MINIMUM FOUNDATION PROGRAM, ASSUMING NUMBER OF INSTRUCTION UNITS FOR 1951-52, AND AMOUNTS OF LOANS WHICH COULD BE SERVICED IN EACH COUNTY UNDER PROPOSED CONSTITUTIONAL AMENDMENT[a]

County	Number of Instruction Units, 1951-52	Capital Outlay Funds Available Annually at $400 Per Unit	Possible Loan Under Proposed Amendment Amortized in 20 Years, Assuming 1-3/4% interest[b]
Alachua	450.50	$ 180,200	$ 2,264,000
Baker	74.50	29,800	374,000
Bay	368.41	147,364	1,851,000
Bradford	115.50	46,200	580,000
Brevard	203.78	81,512	1,024,000
Broward	639.71	255,884	3,215,000
Calhoun	102.53	41,012	515,000
Charlotte	27.59	11,036	138,000
Citrus	64.98	25,992	326,000
Clay	84.05	33,620	422,000
Collier	65.45	26,180	328,000
Columbia	178.18	71,272	895,000
Dade	2,795.01	1,118,004	14,047,000
DeSoto	73.92	29,568	371,000
Dixie	43.53	17,412	218,000
Duval	2,037.63	815,052	10,240,000
Escambia	908.47	363,388	4,565,000
Flagler	34.53	13,812	173,000
Franklin	57.03	22,812	286,000
Gadsden	269.98	107,992	1,356,000
Gilchrist	42.58	17,032	214,000
Glades	22.71	9,084	114,000
Gulf	79.38	31,752	398,000
Hamilton	103.91	41,564	522,000
Hardee	92.04	36,816	462,000
Hendry	57.35	22,940	288,000
Hernando	60.78	24,312	305,000
Highlands	138.49	55,396	696,000
Hillsborough	1,742.64	697,056	8,758,000

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[a] Source: Division of Administration and Finance, Florida State Department of Education.

[b] These figures are computed on the basis of equal annual payments which include principal and interest.

TABLE IV (Continued)

AMOUNTS AVAILABLE ANNUALLY FOR CAPITAL OUTLAY IN FLORIDA COUNTIES UNDER THE MINIMUM FOUNDATION PROGRAM, ASSUMING NUMBER OF INSTRUCTION UNITS FOR 1951-52, AND AMOUNTS OF LOANS WHICH COULD BE SERVICED IN EACH COUNTY UNDER PROPOSED CONSTITUTIONAL AMENDMENTS

County	Number of Instruction Units, 1951-52	Capital Outlay Funds Available Annually at $400 Per Unit	Possible Loan Under Proposed Amendment Amortized in 20 Years, Assuming 1-3/4% interest
Holmes	146.30	$ 58,520	$ 735,000
Indian River	99.56	39,824	500,000
Jackson	403.55	161,420	2,028,000
Jefferson	104.13	41,652	523,000
Lafayette	39.27	15,708	197,000
Lake	312.29	124,916	1,569,000
Lee	191.34	76,536	961,000
Leon	453.99	181,596	2,281,000
Levy	120.33	48,132	604,000
Liberty	44.42	17,768	223,000
Madison	155.94	62,376	783,000
Manatee	292.57	117,028	1,470,000
Marion	374.53	149,812	1,882,000
Martin	62.66	25,064	314,000
Monroe	151.96	60,784	763,000
Nassau	132.50	53,000	665,000
Okaloosa	249.00	99,600	1,251,000
Okeechobee	36.80	14,720	184,000
Orange	829.56	331,824	4,169,000
Osceola	80.60	32,240	405,000
Palm Beach	748.96	299,584	3,764,000
Pasco	176.57	70,628	887,000
Pinellas	956.23	382,492	4,805,000
Polk	1,053.18	421,272	5,293,000
Putnam	218.40	87,360	1,097,000
St. Johns	160.39	64,156	806,000
St. Lucie	158.26	63,304	795,000
Santa Rosa	193.48	77,392	972,000
Sarasota	222.33	88,932	1,117,000
Seminole	208.93	83,572	1,050,000
Sumter	127.30	50,920	639,000
Suwannee	174.00	69,600	874,000
Taylor	107.33	42,932	539,000
Union	45.35	18,140	227,000

TABLE IV (Continued)

AMOUNTS AVAILABLE ANNUALLY FOR CAPITAL OUTLAY IN FLORIDA COUNTIES UNDER THE MINIMUM FOUNDATION PROGRAM, ASSUMING NUMBER OF INSTRUCTION UNITS FOR 1951-52, AND AMOUNTS OF LOANS WHICH COULD BE SERVICED IN EACH COUNTY UNDER PROPOSED CONSTITUTIONAL AMENDMENTS

County	Number of Instruction Units, 1951-52	Capital Outlay Funds Available Annually at $400 Per Unit	Possible Loan Under Proposed Amendment Amortized in 20 Years, Assuming 1-3/4% interest
Volusia	540.69	$ 216,276	$ 2,717,000
Wakulla	66.28	26,512	333,000
Walton	153.80	61,520	772,000
Washington	148.38	59,352	745,000
Total	20,676.32	8,270,528	103,884,000

next two or three years more than $100,000,000 worth of school plants, as shown in Table IV, if they deem it necessary and desirable to do so.

Many of the states, like Florida, are engaged in or anticipate in the near future very extensive building programs. Noteworthy examples in the South are South Carolina and Georgia. Furthermore, there is the possibility of federal aid for school buildings, which has already begun on a limited basis in areas subject to heavy impact of national defense activities as provided under Title II, Public Law 815, 81st Congress.

When one considers the abandoned, or partially abandoned, school buildings which are frequently observed, or are described in reports of school surveys, the question naturally arises whether many of the buildings recently constructed, or to be constructed soon, may not themselves be abandoned within the near future with consequent great loss of a very large part of the capital investment. This question suggested the need for a study to determine the factors which cause the abandonment of school buildings while they are still structurally sound, with the hope of leading to some improvements in the principles and procedures of long term school plant planning which, if followed, might avoid or minimize capital loss through abandonment in the case of school buildings constructed in the future.

In the past, planning of school buildings was almost entirely a local matter of concern only to citizens and school authorities of local school districts, many of them very small in size. In such a situation there was little interest in the aspects of school plant planning which cut across district, county, and perhaps state lines. In more recent years states have provided consultant and supervisory services in the planning of school facilities to a continually increasing extent. As funds for school buildings are provided more and more at the state level, and even possibly from the federal level, supervisory and consultant services in school plant planning will be even further extended. The personnel who render these services should be armed with the broadest possible knowledge of all the problems involved in planning, building, and using school plants. The broadening and clarifying of any segment of that knowledge should be of considerable value to those on every level who are concerned with planning school buildings. The present investigation attempts to broaden and clarify that segment which relates to the factors contributing to the abandonment of school buildings.

Justification for this Study

The justification for this study may be summarized as follows:

Numerous examples of abandoned school buildings in good structural condition were observed, or noted in reports.

A school building of reasonably good quality of construction will last for a very long period of time.

A school building represents a very large investment of public funds, which is a substantial burden, and may be a heavy burden, on school revenues.

A short period of use means a loss of a large part of the value of a building, which would be realized to a greater extent if the building were used longer.

Very large investments in school buildings are imminent in the next few years in practically all the states; these buildings may be subject to abandonment after only a brief period of use, if one may judge by examples.

These facts suggested the need for a study to determine the causes of abandonment of school buildings with the ultimate objective of improving principles and procedures of school plant planning which might avoid or minimize abandonment of school buildings and consequent capital loss in the future.

Statement of the Problem

The problem of this study is to determine the principal factors, or causes, which bring about the abandonment of school buildings after only a part of their possible structural life.

Subsidiary problems of the study may be stated as follows:

1. To secure and make available figures on the amount and extent of abandonment of school buildings as illustrated in Florida.

2. To determine the importance of various causes of abandonment of school buildings.

3. To appraise past practices and procedures in school plant planning as illustrated in Florida with respect to capital loss through abandonment of buildings.

4. To contribute toward further development and improvement of principles and procedures of long term school plant planning.

Procedure

This study involves the analysis of the causes of abandonment of school buildings appearing in the school plant surveys of the sixty-seven counties of Florida made between 1946 and 1952. Survey reports were studied and analyzed to determine the causes for the abandonment, or recommended abandonment of school buildings covered by the surveys. The procedure followed is described in detail and justified in Chapter II.

Several cases of abandoned, or potentially to be abandoned school buildings, were selected for study in some detail. The results of the study of these cases appear in Chapter IV.

Sources of Data

The principal sources of data are the school plant survey reports for each of the sixty-seven counties of Florida made between 1946 and 1949, and similar reports of re-surveys for several of the county school systems made between 1949 and 1952.

The State Department of Education file of Florida school centers was used in identifying school centers which had actually been discontinued and supplemented data of the survey reports on buildings and school membership.

United States Census and Florida State Census figures appearing in published materials were used to gain information on population trends, which had relationship to the abandonment of school buildings.

Some data were derived from correspondence or personal interviews with county superintendents and their staffs, with State Department of Education personnel, with other persons engaged in school work, and by personal visitation of a considerable number of school buildings studied.

Biennial Reports of the Florida State Superintendent of Public Instruction, unpublished doctoral dissertations at the University of Florida, school survey reports from other states, and other published materials were drawn on for supplementary information.

Limitations

The study is limited to Florida schools because of the factor of availability of data. So far as it has been possible to discover, no other state has the detailed data for the study of such a problem as this on a statewide basis. The situation in Florida is assumed to be representative of the nationwide situation, so that determination of causes of abandonment of school buildings in Florida may validly be applied to any American public school system. Certain aspects of the Florida situation and the survey program which was carried out in the state tending to show this to be the case are pointed out in Chapter II.

Among Florida schools the study is limited to school buildings which have been recommended in the building survey reports for total abandonment for school purposes, and other buildings which have actually been abandoned since 1938. Data were obtained on 1553 cases of abandoned buildings and causes of abandonment were determined in 961 cases. No attempt was made to study cases of partial abandonment of school buildings.

The study gives no consideration to possible use for abandoned school buildings, nor does it consider the matter of possible salvage value.

Other limitations in the scope of this study will appear as the data are presented in subsequent chapters.

CHAPTER II

PRINCIPLES, ASSUMPTIONS, AND PROCEDURES IN DETERMINING THE CAUSES OF SCHOOL BUILDING ABANDONMENT

Inasmuch as the factors, or causes, which lead to the abandonment of school buildings may involve in many cases complex economic, social, educational, and political changes which might be considered very difficult to isolate for study and analysis, it seems necessary to describe in some detail the sources of data for this study and the principles and assumptions followed in determining causes of abandonment. The first section of this chapter reports the findings of a review of research and professional literature in education for references pertinent to this investigation. The last part of the chapter describes the origin and nature of the basic data of the study, and outlines the procedures used in determining causes of abandonment of school buildings.

Review of Literature

Reported research in the field of school buildings in recent years appears to be very meager, so much so that a periodical devoted to reviewing educational research declared in 1948 that research in the school plant field had all but ceased and was dangerously near the vanishing point.[1] However, a search through the literature in the field of school administration and finance, as well as an examination of the literature that does exist in the field of school buildings, reveals fairly frequent references to the necessity of abandoning school buildings. Some of the factors which make it necessary to abandon school buildings are discussed, usually in a rather indirect and incidental manner. No published reports of systematic and comprehensive research attempting to investigate all factors involved in school building abandonment were discovered, though attention has been given to individual factors in fairly frequent cases.

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[1] "School Plant and Equipment," Review of Educational Research, XVIII, No. 1 (February, 1948), foreword.

In their still very valuable book on school plant planning, published in 1930, Engelhardt and Engelhardt made little direct reference to the problem of school building abandonment. Their extended discussion of the problem of predicting population trends and their emphasis on the necessity of providing adequate and suitable sites show by implication at least two factors which might cause school buildings to be abandoned or unsatisfactory for use. In urging the desirability of city planning and the necessity of integrating long range school plant planning with over-all city planning, they gave as an illustration a city where the business section was expanding to surround schools near the downtown area, predicting that if the growth continued there would be few residences left downtown and the school buildings in the vicinity would be abandoned. They said: "A school building program must anticipate the trend and nature of the city's growth if buildings are to render a maximum number of years of useful service."[2]

In 1936, on the basis of population studies of areas in Cleveland embracing nearly a century, Irons pointed out:

> . . . . these areas grew from negligible beginnings to their full development in . . . . about seventy years in most cases. Then they began to decline in population, and up to the present they have declined steadily in each case . . . . The oldest . . . . has practically completed its life cycle in one hundred years—forty years upward and sixty years downward.
>
> Already, in Cleveland, we find large schools enlarged by one addition after another at various times, in order to keep up with growth in enrollment, now becoming gradually depopulated.
>
> In several sections of the city schools crowded to the roofs and with classes on half time only ten years ago now have an increasing number of empty rooms each year. Never during its history has Cleveland ceased to grow in total population at each census period. But obviously its residential population has shrunk away in the center while increasing on the periphery.[3]

Evidently referring to the same studies, Irons said several years later:

> We know by this time that the population of a city district does not rise to a peak and remain there. Nor does it subside from the peak to a stabilized plateau . . . . population of a given urban area rises to a peak and almost immediately starts to fall again . . . . it continues to decrease in the ordinary course of events, until the area becomes completely industrialized or converted to other non-residential uses. The entire cycle from start to finish has required about 100 years in the few Cleveland city districts whose life history was complete when this study was made. Of course, exceptions will be found, particularly where the Federal Government is trying to rescue blighted areas by enormous housing projects. But such areas are very minor parts of the whole picture . . . .

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[2] N. L. Engelhardt and Fred Engelhardt, Planning School Building Programs, p. 195.

[3] G. E. Irons, "Population Trends Bring Building Problems." Nations Schools, Vol. 18, No. 2 (August, 1936), pp. 55-56.

> Already we have found that schools which looked like good long-term prospects fifteen years ago are now depleted, and may soon become candidates for abandonment . . . .[4]

In justifying experiments with school structures which can be demounted and salvaged when population declines, Larson observes:

> But neighborhoods have life cycles of their own which very definitely affect the life expectancy of the individual buildings which make up each community. When a neighborhood is new, it is usually occupied by young families with small children. Schools are needed then, but as the children grow up and move away while the parents remain behind, the need steadily diminishes. That is why, of course, in one town after another we find schools in the older areas only partly used, while in the newer neighborhoods on the outskirts there is a desperate shortage of schools.[5]

The phenomenon of neighborhood rise and decline, particularly in metropolitan areas, has received considerable attention from students of human ecology.[6] Theories, such as the concentric growth theory, have been proposed to explain the phenomenon.[7] One writer gave this summary of the causes of neighborhood decline in large cities: the disturbing effect of encroachment of outside substandard areas upon an adequate neighborhood, such as moving in of persons considered socially inferior; the development of internal structural and social decay in the neighborhood; the tendency of people to move to the rim of the city and leave behind dwellings considered less desirable because of technological changes in buildings and equipment and changes of fashions in architecture, which make the older buildings outmoded; and the expansion of an industrial or business zone into adjacent residential areas disturbing and dislodging the more stable population elements.[8]

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[4] G. E. Irons, "Problems Involved in the Rehabilitation of School Buildings," The American School and University, Fourteenth Annual Edition, 1942, p. 30.

[5] C. T. Larson, "A School That Won't Become Obsolete," School Management, Vol. 19, No. 9, (May, 1950), p. 10.

[6] Pauline V. Young, Scientific Social Surveys and Research, Chapter XVI.

[7] Robert L. Southerland and Julian L. Woodard, Introductory Sociology, pp. 422-428.

In a discussion of the necessity of considering the utilization of existing buildings when planning school building programs, the American Association of School Administrators in its Twenty-Seventh Yearbook recognized the factor of shift in population in bringing about the abandonment of school buildings:

> Every large city has had an outward movement of population to the periphery of the corporation or to adjoining suburbs, or both, thereby leaving unused capacity in the so-called downtown schools. This shift in population, coupled with the general decline in school enrollment during the past few years, leaves many cities with housing capacities in excess of actual enrollment. For example, a 1942 survey in one large city recommended that twenty-one of the eighty-four elementary school centers be closed. Effective September 1942, sixteen were actually closed. Among them were a fireproof building erected in 1924 and a number of others with fireproof additions. A similar study in another city in 1943 recommended the elimination of nine elementary school centers . . . . Here are examples of buildings in good condition that were closed because of lack of school population in the attendance areas which they served.[9]

The same publication discusses at some length the factor of "obsolescence" in determining whether a building should be rehabilitated or not:

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[8] Bessie A. McClenahan, "Social Causes of Decline of Neighborhoods," Social Forces, Vol. 20, No. 4, (May 1942), pp. 471-476.

[9] American Association of School Administrators, American School Buildings, pp. 60-61. ✓

> This term is used to designate buildings that structurally are in such condition that they would probably stand for another fifty years or more, but from the point of view of housing an educational program are generally unsatisfactory. These buildings generally have good foundations, good walls, and good roofs, but lack many of the requirements for accommodating a modern educational program. . . . these buildings generally have small sites and are set in the center of the site so that such playground as exists is badly cut up by the placement of the building.[10]

The attitude of the community toward rehabilitation and use of an old building as a factor affecting its possible abandonment is suggested in this yearbook by the question: "Will the community be satisfied to continue to use rehabilitated buildings for the next ten to twenty years?"[11]

In discussing problems encountered in proposals to modernize old school buildings, Viles pointed out that a building "must provide adequate facilities for the school and the community programs to be housed therein. Deficiencies in any of these areas may make a building unfit for school use." Factors to be considered in the determination of when to abandon or when to remodel an old school building are: physical safety and health protection for the pupils, building location (accessibility to pupils, freedom from traffic hazards, noises, or odors), curricular adequacy (adequate or adaptable facilities for program), expansion possibilities, the economy factor (cost of remodeling, plant modernization, whether it fits into a desirable and economical school organization), local financing ability, and the aesthetic factor

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[10] Ibid., p. 266.

[11] Ibid., p. 273.

("if the building and its environment cannot be improved to provide a wholesome and inspiring atmosphere for the children it may be desirable to abandon the building as soon as possible.").[12]

Economy as a factor in deciding on abandonment of old school buildings is indicated in Caudill's recent monograph on school building planning:

> The existing plant represents a great investment to the taxpayers. In any long-range building program you must use the old buildings to fullest extent. But it may be economical in the long-range view to abandon an old building which requires much maintenance. . . .[13]

Economy from another point of view, that of operational cost of the program to be offered at a school center and the educational return to the taxpayer for money expended, is advanced as a reason for discontinuing small school centers with resultant abandonment of their buildings in a considerable number of school surveys and other studies. Since it is from a recent survey and presents the reasoning on this point in detailed and specific terms, it appears to be worthwhile to present the following rather lengthy quotation:

> . . . . Evidence presented elsewhere in this report shows that generally speaking the poorest educational opportunities are provided in the small schools and the best educational opportunities are provided in the large schools. The Board of Education is, therefore, receiving the least educational returns from those centers where it is spending the most per pupil and it is receiving the highest educational returns where it is spending the least per pupil. Numerous educational surveys throughout the nation have shown these facts to be

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[12] N. E. Viles, "The Importance of Modernizing Old School Buildings," American School and University, Nineteenth Annual Edition, p. 167.

[13] William W. Caudill, Your Schools, An Approach to Long-range Planning of School Buildings, p. 32.

> essentially true wherever the costs of large schools are compared with the costs of small schools . . . . Attention is directed particularly to the fact that the cost per pupil in schools for white elementary children with fewer than 100 pupils in A. D. A. is $229.72, whereas the cost per pupil in schools of 500 or more is $117.44 . . . . The average per pupil cost for instruction in the five high schools for white youth with ninety-nine or fewer pupils is $250.00, whereas the per pupil cost in high schools for white youth with 500 or more pupils is $148.95 . . . . If the board would consolidate its expensive and inefficient small school centers, considerable school funds could probably be saved. It might be argued that consolidation would involve expensive transportation costs and that when consideration is given to the additional cost of transportation, small schools can be operated as cheaply as large schools. Table 38 presents an analysis of the cost per pupil in school centers for white children for instruction and

Table 38

Cost Per Pupil in A. D. A. for Instruction and Transportation
(White Elementary and High School Combined)

Average Daily Attendance	No. Schools	Total A. D. A.	Cost Per Pupil in A. D. A.
49 or fewer	. .	. . .	. . . .
50-99	. .	. . .	. . . .
100-199	5	775	$217.30
200-299	6	1,515	198.53
300-399	2	781	185.95
400-499	5	2,302	143.71
500 or more	10	8,508	141.05
Total	28	13,881	154.55

> transportation. . . . This table shows that even when transportation costs were added, the per pupil cost of operating small schools is much higher than the per pupil cost of operating large schools. Even if no school funds were saved by consolidation, considerably better educational returns could be expected from the same expenditures.[14]

Considerable research has been done on the problem of size of schools and of school administrative units as related to educational effectiveness. The most significant research to date on this problem has recently been summed up by the National Conference of Professors of Educational Administration in an analysis and summary of research findings in public school finance prepared for the National Citizens Committee on Education. In this summary it is pointed out that Dawson in 1934 developed through research and summarization of expert opinion these standards for minimum size of schools:

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[14] *Public Schools of Caddo Parish, Louisiana, A Survey Report*, pp. 206-209.

> For elementary schools, 240 pupils enrolled in elementary grades.
>
> For a six-year high school, 210 pupils enrolled in high school grades.
>
> For a junior high school, 210 pupils in junior high school grades.
>
> For a senior high school, 175 pupils in senior high school grades.[15]

The significance of the kind of program offered in a school as a factor in its discontinuance and the abandonment of the building is suggested in the statement in this summary: "It was primarily the limited educational program of the one-room schools that led to their decline from 196,037 in 1917-18 to 74,944 in 1947-48."[16]

Dawson's findings have been confirmed by later studies. They have been generally accepted by survey staffs in many states and localities in making recommendations for reorganization of school centers. Examples appear in reports of statewide surveys in such widely scattered states as Idaho[17] and South Carolina.[18] It might be noted, however, that the latest studies indicate that Dawson's minimum standards, particularly for high schools, may be too low.[19]

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[15] National Conference of Professors of Educational Administration, Some Problems and Issues in Public School Finance, Tentative Edition, p. 194.

[16] Ibid., p. 194.

The research on the problem of school size related to educational efficiency is summed up in these statements:

> As the size of the school becomes larger, up to a certain point, the quality of the educational program generally becomes more satisfactory.
>
> As the size of the school becomes larger, the per capita cost of the educational program generally declines.
>
> The per capita cost of education and the quality of the educational program are generally considered unsatisfactory in elementary schools having fewer than 175 to 200 pupils and in high schools having fewer than 250 to 300 pupils, except as cost is greatly increased.[20]

These statements have been so abundantly supported by research and by experience that they appear to have attained the status of established principles. Though the point is not particularly pertinent in the present investigation, it might be noted here that these principles recognize a maximum desirable size of school as well as a minimum. The importance of both minimum and maximum size as a factor to be considered in planning school buildings was pointed out in a special issue of Architectural Forum devoted to school plant planning and design:

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[17] Public Education in Idaho, A Report of the Idaho Education Survey Commission, pp. 64-65.

[18] Public Schools of South Carolina, A Report of the South Carolina Education Survey Committee, p. 176.

[19] William J. Woodham, Jr., "The Relationship Between the Size of Secondary Schools, the Per Pupil Cost, and the Breadth of Educational Opportunity." Unpublished Doctor's dissertation, University of Florida, February, 1951, pp. 177-179.

[20] National Conference of Professors of Educational Administration, op. cit., pp. 229-230.

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[20] Ibid., pp. 229-230.

> From both an educational and an administrative view, the evidence has been accumulating that the most efficient educational unit is the medium-sized school. This can be defined as a school having at least one classroom, and no more than three, per grade. Pedagogically, this "child-sized" unit provides the best balance between the personal and communal needs of students. To the small child in the lower grades, it has the important effect of presenting a world that is big and full of variety but not overwhelming as it often seems in larger schools. From an administrative viewpoint, the medium-sized school supports enough students (usually between 200 and 800) to make practicable the installation of expensive teaching equipment which smaller schools cannot afford. Educators also find that the medium-sized unit is administratively more efficient than larger schools, especially with regard to such high fixed charges as school bus service, maintenance, and supervision. The medium-sized school is also better adapted to serve as a neighborhood center, a function that is being assigned more and more to school buildings.[21]

Some school survey reports hint that the system of organization of small local school districts, coupled with ignorance and irresponsibility on the part of school boards of such small districts, has resulted in many cases in the construction of buildings and classrooms which are not needed and must be abandoned. The Florida Citizens Committee on Education asserted that in some cases unused classrooms indicate "a situation which has resulted from an archaic district organization."[22] The report of a comprehensive survey in Georgia declares:

> . . . . 40 per cent of the white and 95 per cent of the Negro schools are at present unfit for school use. Many of these buildings could be renovated and made reasonably satisfactory. . . . The majority of the buildings, however, were constructed during the era when individual local districts

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[21] "Schools," Architectural Forum, Vol. 91, No. 4, (October, 1949), p. 84.

[22] Education and the Future of Florida, p. 185.

> independently planned, located and constructed buildings, for a limited territory only, with no regards for future developments to meet the needs of a modern school.
>
> . . . .
>
> The location of a great percentage of the present buildings makes them useless. Many others need to be abandoned and replaced with larger and more accessible ones.[23]

Summary of Review of Literature

This review of literature relating to the problem of abandonment of school buildings may be summarized as follows:

No research attempting to determine comprehensive causes of school building abandonment was discovered. Frequent references were found to the problem of school building abandonment, particularly in large cities, with some discussion, sometimes amounting to little more than speculation, of the factors involved in abandonment. The effect of population shifts in cities on school building abandonment has been carefully studied and reported on in at least one instance, and commented on in several others. The factor of relationship between size of school and educational returns for money expended has been extensively studied in the last twenty years.

These factors involved in the abandonment of school buildings have been established by research or suggested by writers on the subject:

1. Population decline, or shifts, leaving buildings unneeded.
2. "Obsolescence" of buildings; i.e., buildings do not meet

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[23] A Survey of Public Education of Less than College Grade in Georgia, 1947, pp. 110-111.

present standards for health, safety, and comfort of children, and are not adequate or suitable for the school program now offered.

3. A building may become out of style in the eyes of the public.

4. A building may require excessive operation, maintenance, and repair cost.

5. A building may not fit into a desirable and economical school organization.

6. The school may be too small to offer the kind of school program desired within the resources available for its support.

7. Buildings may have been poorly planned and located to serve the pupils with the kind of program now desired as the result of an archaic system of excessively small school districts, together with lack of proper foresight and planning on the part of local school officials.

The Florida School Plant Survey Program

As stated in Chapter I the principal source of data for the present study is the reports of surveys of school plant problems and needs made in all of the sixty-seven counties of Florida from 1946 to 1952. In the following paragraphs are described the legal provisions for these surveys and their relationship to the Florida Minimum Foundation Program for the public school system. The significance of these surveys in determining factors in school building abandonment is then discussed and the procedures used in deriving the data are indicated.

These surveys were made under the provisions of the Florida School Code passed by the legislature in 1939 and of the Florida Minimum

Foundation Program Law of 1947. The Foundation Program Law resulted from the comprehensive study of the school system of Florida by the Florida Citizens Committee on Education from 1945 to 1947.

Pertinent excerpts from the 1939 law are:

> Survey Required.--As soon as practicable unless a school survey has been made in the county within the past ten years, each county board shall arrange for a survey of the county school system to aid in formulating a long-time program for the schools of the county. The report based on the survey shall show the location and condition of all school buildings, the location of pupils and the transportation routes, the places where schools for the various grades should be maintained temporarily or permanently, and shall include such other information as may be required under regulations of the state board. The county board may request assistance from the state department in carrying on the survey, or may utilize such other agency as may be approved under the regulations of the state board. . . .[24]

> School Plant Program Based on Survey.--The county board of any county in which a survey has been made as provided in this chapter shall, within six months after the completion of the survey, adopt and submit to the state superintendent a proposed school plant program for the schools of that county. This school plant program shall insofar as practicable be based upon the findings and the recommendations of the survey report . . . .[25]

The law further provided that the county school board should adopt a proposed "capital outlay program and budget" each year as part of its regular annual budget "in order that the capital outlay needs of the county school system for the entire year may be well understood and provisions made for same." This capital outlay program and budget beginning July 1, 1941, was to "be based upon and in harmony with the school plant program previously filed with the state superintendent."[26]

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[24] Florida School Laws, 1946, Section 235.15.

[25] Ibid., Section 235.16.

[26] Ibid., Section 235.18.

These provisions of the 1939 School Code were for all practical purposes almost completely ignored. A very small number of counties, among them Dade, Escambia, Broward, and Madison, carried out school plant surveys previous to 1946. No funds were provided by the state for school buildings, and there was no practical way to enforce the law requiring an annual "capital outlay program and budget" in each county school system, especially in view of the fact that there was comparatively little building of school plants in the years immediately preceding and during World War II.

The Florida Citizens Committee on Education gave careful consideration to the problems of school plants in its study between 1945 and 1947. With the cooperation of the county school authorities school plant surveys were made in five sample counties, Bay, Columbia, Hillsborough, Manatee, and Pinellas. The Citizens Committee's studies showed the inadequacies and deficiencies of Florida's school plants and forecast large expenditures for additional buildings. Its report stated:

> Many capital outlay expenditures within the next few years will be made for new centers. Some of these new centers will partially or totally replace existing centers which are satisfactory except as to location. This will be necessary to take care of Florida's rapidly increasing population, and to provide reorganization of school centers. Perhaps the most significant organizational development in the school program during the next ten years will be the reorganization of small school centers.
>
> Florida's population is one of the most rapidly increasing in the nation. During the past twenty years, the school enrollment has increased at the rate of 2.8 percent annually. There seems ample evidence that the rate of increase during the next ten years will be substantially greater than the rate for the past twenty years. Even if we assume that only the rate of increase of the past twenty years will be maintained, there will be an

> annual need for approximately 400 classrooms to provide for increasing school population. . . .[27]

The Citizens Committee analyzed the existing provisions for financing needed new school buildings and found the resources of the counties and the special tax school districts completely inadequate on a statewide basis to provide needed buildings. It concluded:

> Adequate financing of school buildings in Florida, therefore, involves the following: (1) substantial state assistance for capital outlay and debt service expenditures; (2) the reorganization of special tax districts; (3) the sound planning of school plant construction programs.[28]

On the basis of these conclusions, the Citizens Committee recommended that local special tax school districts with the power to bond themselves and build buildings be eliminated and that buildings hereafter "be located at logical centers designed to meet the needs of the population without any reference whatever to existing district boundaries"; that surveys including population studies be "a prerequisite for any construction," since school buildings "cannot be safely located by guess"; that "plans for school centers and building construction should be developed on a county-wide basis"; that "careful studies of the educational program to be developed to meet community needs should be undertaken before any building plans are prepared"; that a financial program should be worked out so every county, by careful planning, can have adequate buildings and equipment," this financial program to include $400 per instruction unit (approximately 30 pupils enrolled) each year to be allocated to each county school system under a foundation program.[29]

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[27] Education and the Future of Florida, p, 191.

[28] Ibid., p. 195.

These recommendations became a part of the educational policy of the state, along with recommendations relating to the kind and quality of the school program desired, with the enactment of the Minimum Foundation Program Law in 1947. In providing for $400 per instruction unit for capital outlay expenditures the Minimum Foundation Program Law stipulated:

> . . . . that the amount included in the minimum foundation program for capital outlay and debt service shall be expended only upon capital outlay projects and debt service for new projects approved by the state superintendent in accordance with the regulations of the state board, on the basis of a survey authorized under the regulations of said board . . . .[30]

Pursuant to this provision of the Foundation Program Law the State Board of Education adopted regulations for the administration of the Foundation Program Capital Outlay and Debt Service Funds. Of these regulations the clause pertinent to the present study provides that counties might not spend any of their Foundation Program Capital Outlay Funds, or receive any allocation of such funds from the state, until:

> . . . . the State Superintendent ascertains and certifies that the county has submitted an adequate and acceptable plan and program for using Capital Outlay and Debt Service Funds in accordance with the provisions of law. This plan and program shall be based on a survey of the school plant needs of the county made or revised during the year 1947, or later, by or under the direction of the State Department of Education. Such surveys shall be made with the cooperation of the county board and shall be based on spot maps and other essential

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[29] Ibid., pp. 195-196.

[30] Section 236.07 (6), Florida Statutes, 1947.

> information provided by the county superintendent during the year 1947 or later.[31]

The regulations further provided that Foundation Capital Outlay Funds could be spent only on certain types of school plant projects approved by the State Superintendent of Public Instruction after the county submits "an adequate plan and program" for using the funds based on a survey.

These provisions of law and regulations made it necessary to conduct school building surveys in all of the sixty-seven counties of Florida within a period of about two years, with later restudies demanded in some cases by changing conditions.

These surveys were made to implement the capital outlay provisions of the Foundation Program Law, which in turn was based on the findings of the Citizens Committee on Education as to the kind of school program and school opportunities desired by the people of the State of Florida for the children of the state. Therefore, the fundamental standards and the principles to be followed in making the surveys were set by the findings of the Citizens Committee study, which defined the principal elements of an adequate program for the public schools as follows:

> 1. A broad program of free public education available to all the children of the state regardless of place of residence or race encompassing not only the traditional grades of one to twelve but also adequate provision for public funds for kindergarten; junior colleges incorporating general college and vocational programs; and, educational opportunities for adults. . . .

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[31] Regulations of the State Board of Education of Florida, 1950, p. 187.

> 2. An instructional staff consisting of professional people highly trained not only in the areas in which they teach but in the skill and art of teaching.
> 3. An administrative and supervisory staff of professionally trained personnel competent to organize, administer, supervise and furnish the type of leadership necessary to develop the educational program to its maximum possibilities.
> 4. Adequate provision for necessary transportation, health, school lunch, and recreational services.
> 5. Adequate physical facilities including well lighted, well heated, well equipped, well maintained, sanitary, attractive school plants functionally designed to service the educational program.
> 6. Adequate libraries, textbooks, instructional supplies and audio-visual aids.
> 7. A financial program adequate to meet the costs of the program in every county of the state.
> 8. Competent administration and an administrative organization, the legal frame work of which makes it possible for the educational program to function with maximum efficiency.[32]

It is to be noted that this definition of an adequate program for the public schools only proposes for all the children in all parts of the state no more than the educational opportunities and the school program enjoyed by children in good school systems anywhere in the United States. It is the type of minimum educational program for a state proposed following practically every state-wide study of educational problems in recent years in the United States. Examples are Georgia, South Carolina, Idaho, New Mexico, Texas, and West Virginia.[33]

The survey program was organized to implement the provisions of law and regulations and carry out the intent and purpose of the Florida

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[32] Education and the Future of Florida, p. 231.

[33] Cf. Public Schools of South Carolina, A Report of the South Carolina Education Survey Committee, and Public Education in Idaho, A Report of the Idaho Education Survey Commission.

Minimum Foundation program. The fundamental principles and standards were based on the objectives of the Foundation Program as set forth above.[34] The procedures followed in making the surveys are indicated in the "Foreword" of practically all the county survey reports:

> This study is, in a very real sense, a cooperative project. The responsibility for assembling basic data and preparing spot maps was assumed by the school officials of the county. The survey staff assumed the responsibilitity for analyzing spot maps and pertinent basic data, for studying the status of school plants and determining needs, and for preparing the summaries and recommendations in this report. . . .
>
> . . . .
>
> Each school was visited and studied in detail by two or more members of the staff. Spot maps, which are so essential for an adequate study of school building needs, were made in the County Superintendent's office from work maps prepared by principals with the assistance of teachers and pupils. Principals also prepared data sheets giving detailed information concerning buildings under their jurisdiction.
>
> All major recommendations included in this report were passed upon by the entire survey staff. While the County Superintendent's office provided needed information, the survey staff is entirely responsible for all recommendations in this report.[35]

The composition of the survey staffs which made the surveys and were responsible for the survey reports is of particular significance for the present study. Survey staffs for each county were organized by the State Department of Education, varying in membership from three to ten, according to the number of schools in the county. In organizing survey staffs the policy was followed of securing staff members with a variety of viewpoints. The chairman of the staff was usually a State Department of Education or college staff member with considerable experience in school survey work, often in a number of other states. A specialist in pupil transportation was on all the staffs and a school plant planning consultant or a school architect served in all the larger and most of the smaller counties. Persons specializing in the field of instruction were included to balance the viewpoints of those whose chief interest and training were in the fields of school administration, school plant planning, and school finance. People active in public school work, including county superintendents, principals, supervisors of instruction, and classroom teachers, served on many of the survey staffs, as did many college staff members. The survey staffs represented expert knowledge and opinion on matters relating to the public school program, school organization, administration and finance, and school buildings.[36]

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[34] Dr. E. L. Morphet, who left the Directorship of Administration and Finance in the Florida State Department of Education to become Executive Secretary of the Florida Citizens' Committee on Education, was Coordinator of School Surveys and administered the survey program in its early months.

[35] _Proposed School Plant Program for Dade County, Florida,_ foreword.

Survey staffs spent from two to five days in each county, inspecting all the school buildings, studying spot maps and school population trends, and conferring with school officials and in many cases with interested school patrons and other citizens. The chief task of the survey staff in every county was to determine in the light of the desired educational program and school opportunities for all the children what school centers should be continued in operation, what new school centers should be established, and in connection with this what buildings should be continued in use, or abandoned and replaced by new buildings. On the basis of the determination made concerning operation of school centers, the schools were classified for the administration of Foundation Program Capital Outlay Funds, as "permanent" or "probably permanent" centers where such funds could be spent for needed buildings, or as "probably temporary," "temporary," or "abandon immediately" centers where such funds could be spent only to a limited extent, or not at all.[37]

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[36] See Appendix A.

In making recommendations survey staffs were not obliged to consider artificial impediments such as small school district lines, since all special tax school districts had been consolidated by the Foundation Program Law of 1947 into one county-wide district.[38] The whole county could be considered as one school area in which school centers could be established where they would best serve the pupil population with the kind of school program desired. Florida school law and the financial provisions of the Minimum Foundation Program even made it possible to ignore county lines in planning desirable attendance areas. Furthermore, since the capital outlay provisions of the Florida Foundation Program were relatively liberal, the survey staffs could recommend building programs including abandonment of old buildings, on the basis of what was needed for the desired kind of school program and school opportunities, rather than on the basis of stringent financial expediency. The same principles and standards were followed for schools of both white and Negro races.

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[37] See Appendix B.

[38] Section 230.34, Florida Statutes, 1947.

The findings and recommendations of the survey staff were presented to the county board of public instruction in the form of a written report, which attempted to set forth the reasons and justifications for the recommendations. The county school authorities had the privilege of objecting to any recommendation with which they did not agree, and when good cause was shown the survey staff often revised its recommendations. The county board then adopted the survey recommendations as the basis for its "plan and program" for capital outlay expenditure. All recommendations were subject to revision as conditions changed, and many counties have called for and had carried out supplementary surveys since the original surveys were completed in 1949.

In summary, the Florida school survey program, required by law and State Board of Education Regulation, involved the study of every school center and school building in the state during the period from 1946 to 1949, and subsequent re-studies of some situations; the studies were made by survey staffs competent to determine facts and make recommendations concerning the school program, school organization, and school buildings; the findings and recommendations of the reports concerning school buildings are largely unhampered by essentially irrelevant, artificial factors such as small school district lines and local limitations of finance; the survey reports may validly be taken as representing the concensus of expert opinion on the matters covered, including causes of abandonment of school buildings.

The question may be raised as to whether causes appearing in survey reports for recommending the abandonment of a school building are to be taken necessarily as being real causes of abandonment. Suppose buildings are not abandoned, in spite of survey recommendations that they be abandoned. May the reasons given in the survey reports then validly be considered as indicating factors contributing to abandonment of school buildings for the purpose of this study? The answer seems to be that there is a sufficiently large sample of the buildings covered by this study already abandoned fully to justify the assumption that the causes of abandonment appearing in the survey reports are valid. Of 961 cases of school buildings recommended for abandonment in survey reports, 340, or more than one-third, had been abandoned up to September, 1951. Others are known to have been abandoned since, while many merely await the completion of building programs now under way or being planned before they, too, will be abandoned. An example is a north Florida county whose officials declared to a survey staff they were ready to close more than two dozen small Negro schools and abandon an obsolete white elementary school building just as soon as financial arrangements could be made to replace the buildings and provide transportation service.[39] It is obvious, too, that in the normal course of events in a rapidly growing state like Florida, conditions will change and factors which appeared at the time of the survey to make necessary the abandonment of some buildings will be nullified. For example, the tentatively recommended abandonment of certain school buildings in Brevard County because school membership was declining and too small will probably not take place because of a large increase in population resulting from a national defense activity. Similar cases will probably be found in Escambia County as the result of expansion of paper mills and other industries, as well as defense activities. It seems reasonable to believe that these cases do not mean that the survey staffs were mistaken in the recommendations, or that their reasons for recommending abandonment were invalid, but simply means that the factors contributing to abandonment of buildings in these cases ceased to operate owing to changing conditions.

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[39] At a conference with school board members and county superintendent at Madison, Florida, February, 1952.

In the course of this investigation eighty-nine Florida school building survey reports were examined. These consisted of the original survey reports made in all sixty-seven counties since 1946, as a result of or in connection with the Florida Minimum Foundation program; reports of full re-surveys in some counties; and supplements to survey reports where limited school building problems were re-studied subsequent to the regular surveys.

All buildings recommended in the survey reports for immediate abandonment, for abandonment as soon as buildings to replace them could be built, and for probable abandonment within ten to fifteen years were listed. A total of 961 cases of recommended school building abandonment were found in the survey reports, and an additional 592 cases of school discontinuance and building abandonment since 1938 and before the surveys were made were determined from State Department of Education records.

The causes of abandonment as specifically given in the survey reports, or inferred from the descriptions and discussions in the reports, were noted and classified in each of the 961 cases. School centers recommended for discontinuance, and other survey recommendations involving abandonment of buildings, where abandonment had actually taken place up to July 1, 1951, were determined from reports of the counties to the State Department of Education. Data on the school buildings and sites, and information on average daily membership since 1938 were obtained from the survey reports and from State Department of Education records.

These data are summarized in tables presented herein and are discussed in Chapter III.

For verification of the factors contributing to the abandonment of school buildings derived from the survey reports, detailed studies of a number of representative cases of abandonment or prospective abandonment were undertaken. In these cases more intensive and detailed analysis of factors was possible. Data for the study of these cases were obtained from State Department of Education records, from official reports, from correspondence and interviews with county school officials and local citizens, and from personal visitation of the schools, as well as from the survey reports. The results of the study of these representative cases are presented in Chapter IV.

In Chapter V the findings of this investigation are summarized, and conclusions and implications are discussed.

CHAPTER III

FACTORS CONTRIBUTING TO ABANDONMENT OF SCHOOL BUILDINGS DETERMINED FROM SCHOOL BUILDING SURVEY REPORTS

This chapter presents significant data relating to school buildings abandoned in Florida since 1936, or recommended for abandonment in Florida school building survey reports, and describes the factors contributing to abandonment as determined from study and analysis of the survey reports.

Total enrollment in Florida schools increased from 389,795 in 1936-37 to 527,174 in 1950-51, as shown in Table V. In the same period of time the number of school centers, that is, locations at which schools are operated, decreased from 2145 to 1434. The mean enrollment at each school center increased from 182 to 368. Enrollment increased 35.2 per cent during the fifteen year period, the number of school centers decreased 33.2 per cent, and the mean enrollment per center increased 102.2 per cent.

The figures from Table V mentioned above are significant in relationship to the data presented in Table VI, which shows 942 school buildings actually abandoned in Florida since 1938, approximately in the period when enrollment was growing by 35.2 per cent. Table VI shows the number of buildings abandoned by four periods: immediately before World War II, during the war, immediately after the war, and in the last three years. The number of buildings actually abandoned in

TABLE V

TRENDS IN SCHOOL ENROLLMENT, NUMBER OF SCHOOL CENTERS, AND MEAN ENROLLMENT PER SCHOOL CENTER BY WHITE AND NEGRO RACES IN FLORIDA, 1936-1951

Year	White Enrollment	No. White Centers	Mean Enrollment	Negro Enrollment	No. Negro Centers	Mean Enrollment	Total Enrollment	Total No. Centers	Mean Enrollment
1936-37	288,310	1163	248	101,485	982	103	389,795	2145	182
1937-38	292,959	1113	263	103,865	975	107	396,824	2088	190
1938-39	289,953	1140	254	104,632	987	106	394,585	2127	186
1939-40	292,440	1098	266	105,460	968	109	397,900	2066	193
1940-41	298,836	1073	279	106,486	958	111	405,322	2031	200
1941-42	296,014	1033	287	105,995	913	116	402,009	1946	207
1942-43	289,730	1006	288	103,958	883	118	393,688	1889	208
1943-44	289,024	971	298	101,605	863	118	390,629	1834	213
1944-45	295,522	972	304	101,842	845	121	397,364	1817	219
1945-46	311,549	942	331	105,315	839	126	416,864	1781	234
1946-47	321,342	931	345	108,281	808	134	429,623	1739	247
1947-48	337,185	917	368	111,723	779	143	448,908	1696	265
1948-49	356,191	904	394	115,125	701	164	471,316	1605	294
1949-50	375,295	875	429	120,368	633	190	495,663	1508	329
1950-51	401,083	871	460	126,091	563	224	527,174	1434	368

each of these periods shows a moderate increase from 225 in the earliest period to 248 in the latest period. The figures by race show that the

TABLE VI

NUMBER OF SCHOOL BUILDINGS ACTUALLY ABANDONED IN FLORIDA BETWEEN 1938 AND 1951 DISTRIBUTED IN PERIODS BEFORE THE WAR, DURING THE WAR, IMMEDIATELY AFTER THE WAR, AND LAST THREE YEARS

	Abandoned 1938-1941	Abandoned 1942-1945	Abandoned 1946-1948	Abandoned 1949-1951	Total
White:					
Reported in surveys	2	2	46	73	123
Abandoned before surveys	114	107	45	5	271
Total white	116	109	91	78	394
Negro:					
Reported in surveys	0	0	69	158	227
Abandoned before surveys	109	129	81	2	321
Total Negro	109	129	150	160	548
Total white and Negro	225	238	241	248	942

number of white school buildings abandoned per period has decreased, while the number of Negro school buildings abandoned has increased each period. It is unnecessary to point out that the ratio of buildings abandoned to total number of school centers has increased each period with the decline in number of centers shown in Table V. Table VI shows that 271 white school buildings and 321 Negro school buildings were abandoned before the surveys, a total of 592, while 123 white school buildings and 227 Negro buildings, or 350 have been abandoned as recommended in survey reports. These figures suggest that the school building survey program, which did not get fully under way until 1948, had little effect on the rate of abandonment of school buildings; abandonment since 1948 seems to conform to trends which began in the pre-war period.

Table VII shows the total number of school buildings and classrooms recommended for abandonment in the survey reports, classified by type of construction, masonry or frame, and by ownership. A total of 384 white school buildings with 1891 classrooms, and 557 Negro school buildings with 1330 classrooms were recommended for abandonment. Seven of the white school buildings and 152 of the Negro school buildings are owned by private agencies, mostly churches and fraternal organizations. Table VIII shows that 138 of the white school buildings and 15 of the Negro school buildings recommended for abandonment had major auxiliary facilities such as auditoriums and lunchrooms.

The number of regular school buildings and other buildings used for school purposes, recommended for abandonment in the survey reports, is shown in Table IX. Regular school buildings listed in this table are buildings designed and built specifically for school use; the other buildings used for school purposes are churches, lodges, converted residences, war surplus buildings, and miscellaneous structures. This table reveals that 707 out of the 961 buildings, or 74 per cent, were

TABLE VII

NUMBER OF SCHOOL BUILDINGS AND CLASSROOMS RECOMMENDED FOR ABANDONMENT IN FLORIDA SURVEY REPORTS CLASSIFIED ACCORDING TO NUMBER OF ROOMS IN BUILDING, TYPE OF CONSTRUCTION, OWNERSHIP, AND RACE OF PUPILS

	County-Owned				Not County-Owned					
	Frame		Masonry		Frame		Masonry		Totals	
No. Rms.	No. Bldgs.	No. Rms.	No. Bldgs.	No. Rms.	No. Bldgs.	No. Rms.	No. Bldgs.	No. Rms.	No. Bldgs.	No. Rms.
White:										
1	26	26	1	1	2	2	0	0	29	29
2	68	136	23	46	1	2	0	0	92	184
3-5	87	316	58	226	4	16	0	0	149	558
6-10	22	161	57	419	0	0	0	0	79	580
10-20	0	0	31	449	0	0	0	0	31	449
20-30	0	0	4	91	0	0	0	0	4	91
Total White	203	639	174	1232	7	20	0	0	384	1891
Negro:										
1	138	138	6	6	126	126	5	5	275	275
2	147	294	3	6	12	24	0	0	162	324
3-5	73	254	14	50	7	24	0	0	94	328
6-10	30	217	5	38	0	0	1	9	36	264
11-20	6	76	2	23	1	11	0	0	9	110
21-30	1	29	0	0	0	0	0	0	1	29
Total Negro	395	1008	30	123	146	185	6	14	577	1330
Total White and Negro:	598	1647	204	1355	153	205	6	14	961	3221

county-owned buildings specifically designed and built for school use. The proportion of county-owned regular buildings is considerably less among Negro schools than among white schools. A total of 337 out of 577, or 58 per cent of the Negro buildings, were regular county-owned structures.

TABLE VIII

NUMBER OF SCHOOL BUILDINGS WITH MAJOR AUXILIARY FACILITIES RECOMMENDED FOR ABANDONMENT IN FLORIDA SCHOOL SURVEY REPORTS

Facilities	White School Buildings	Negro School Buildings	Total Buildings
Auditorium only	97	12	109
Lunchroom only	13	1	14
Auditorium and a lunchroom	19	1	20
Other major auxiliary facilities	9	1	10
Total	138	15	153

TABLE IX

NUMBER OF REGULAR SCHOOL BUILDINGS AND CLASSROOMS AND OTHER BUILDINGS USED FOR SCHOOL PURPOSES RECOMMENDED FOR ABANDONMENT IN FLORIDA SCHOOL SURVEY REPORTS

	County-Owned				Not County-Owned			
	Regular School Bldgs.		Other Bldgs.		Regular School Bldgs.		Other Bldgs.	
	No. Bldgs.	No. Classrooms	No. Bldgs.	No. Classrooms	No. Bldgs.	No. Classrooms	No. Bldgs.	No. Classrooms
White:	370	1825	7	41	6	22	1	3
Negro:	337	929	88	202	8	21	144	178
Total	707	2754	95	243	14	43	145	181

Table X presents an attempt to classify the 961 buildings recommended for abandonment in the survey reports according to type of community in which the buildings were located, rural, village, or urban. The mean number of classrooms in buildings in each type of community is shown. This table reveals that while rural school buildings were the most numerous, the number of classrooms recommended for abandonment was nearly as great in urban as in rural areas.

TABLE X

NUMBER OF SCHOOL BUILDINGS AND CLASSROOMS RECOMMENDED FOR ABANDONMENT CLASSIFIED ACCORDING TO TYPE OF COMMUNITY, RURAL, VILLAGE, OR URBAN, AND RACE OF PUPILS

		Number of Buildings	Number of Classrooms	Mean Number of Classrooms Per Building
White Race				
Rural		229	764	3.3
Village		80	362	4.5
Urban		75	765	10.2
	Total	384	1891	4.9
Negro Race				
Rural		426	693	1.6
Village		67	131	1.9
Urban		84	506	6.0
	Total	577	1330	2.3
Total White and Negro		961	3221	3.4

Dates of construction of buildings recommended for abandonment in the survey reports are indicated in Table XI. If buildings which were not county-owned and those for which no date is known are disregarded, a median date of construction for white school buildings of 1922 can be calculated. A similar median for Negro school buildings is 1930. The difference in median dates can probably be explained by the fact that under the federal relief programs of the nineteen-thirties, numerous one- and two-room Negro schools were constructed which the survey staffs recommended for abandonment. These buildings were usually constructed without long range planning and with little regard for accepted principles of school plant planning.

TABLE XI

DATE OF CONSTRUCTION OF BUILDINGS RECOMMENDED FOR ABANDONMENT IN FLORIDA SCHOOL SURVEY REPORTS

	White		Negro	
	County-Owned	Not County-Owned	County-Owned	Not County-Owned
No date	0	7	47	113
Before 1910	42	0	61	8
1911-1920	115	0	37	6
1921-1930	133	0	94	11
1931-1940	75	0	155	11
1941-1951	12	0	31	3
Total	377	7	425	152
Median date:	1922		1930	

Table XII presents data on the date of construction and the date of abandonment of county-owned buildings mentioned in survey reports and actually abandoned by 1951. Median dates of construction derived from this table are 1920 for white school buildings and 1923 for Negro school buildings. The median date of abandonment for both white and Negro school buildings is calculated to be 1949. Thus these actually abandoned schools had a median useful life of 29 and 26 years respectively for white and for Negro school buildings.

TABLE XII

COUNTY-OWNED SCHOOL BUILDINGS RECOMMENDED FOR ABANDONMENT AND ACTUALLY ABANDONED CLASSIFIED ACCORDING TO DATE OF CONSTRUCTION, DATE OF ABANDONMENT, AND RACE OF PUPILS

Date of Construction		White		Negro
Not known		7		0
Before 1910		12		31
1911-1920		47		11
1921-1930		30		28
1931-1940		25		49
1941-1951		2		8
		123		127
Median date:	1920		1923	
Date of abandonment				
1938-1941		2		0
1942-1945		2		0
1946-1948		46		45
1949-1951		73		82
		123		127
Median date:	1949		1949	

Grades taught at the time of the survey at school centers where school buildings were recommended for abandonment are shown in Table XIII. In both white and Negro schools the median is the seventh grade.

Membership at school centers where buildings were recommended for abandonment appears in Table XIV. The median membership in the white schools is calculated to be 57 and in the Negro schools 37. This

TABLE XIII

NUMBER OF SCHOOL BUILDINGS RECOMMENDED FOR ABANDONMENT IN SURVEY REPORTS DISTRIBUTED ACCORDING TO GRADES AT THE SCHOOL CENTERS

Grades	White Race No. Bldgs.	Negro Race No. Bldgs.	Total
1- 5	47	53	100
6	158	182	340
7- 8	138	280	418
9-10	23	43	66
11-12	18	19	37
	384	577	961

TABLE XIV

SCHOOL MEMBERSHIP AT TIME OF SURVEY AT SCHOOL CENTERS WHERE BUILDINGS WERE RECOMMENDED FOR ABANDONMENT

Membership	White Race No. Bldgs.	Negro Race No. Bldgs.	Total
1-10	12	30	42
11-20	51	122	173
21-40	73	167	240
41-59	66	102	168
60-89	55	54	109
90-119	28	30	58
119-up	99	72	171
	384	577	961
Median Membership:	55	37	

reflects the fact that white schools were organized as larger units, the movement toward consolidation having progressed much farther among white schools than among Negro schools.

Factors Contributing to the Abandonment of School Buildings According to the Survey Reports

The results of the study and analysis of the Florida school survey reports to determine factors contributing to the abandonment of buildings are presented in the following pages and summarized in Table XV.

The procedure for this analysis was as follows: All statements in the survey reports indicating a reason for recommending abandonment of buildings were noted and classified. It was found that seven categories were sufficient to classify all the reasons, or factors, indicated. These factors were determined with as much objectivity as possible, as indicated in the discussion of each one in the following pages.

Each one of the 961 cases was classified according to what appeared to be the most important factor in its recommended abandonment, and also according to any other factors which appeared to be present. This classification is shown in Table XV. The bases for classifying the cases according to factors involved in their recommended abandonment were specific statements in the survey reports and inferences drawn from descriptions and recommendations. Table XV should be used with caution and with the understanding that it attempts to present in quantitative terms data derived in a highly subjective manner. It is

TABLE XV

NUMBER OF SCHOOL BUILDINGS AND CLASSROOMS DISTRIBUTED ACCORDING TO PRINCIPAL FACTOR CONTRIBUTING TO ABANDONMENT OF BUILDINGS AS DETERMINED FROM FLORIDA SCHOOL SURVEY REPORTS

	White Schools				Negro Schools			
	Most Important Factor in Abandonment			Factor Present but Secondary	Most Important Factor in Abandonment			Factor Present but Secondary
	No. Bldgs.	No. Rms.	Mean No. Rms.	No. Bldgs.	No. Bldgs.	No. Rms.	Mean No. Rms.	No. Bldgs.
School Membership Too Small	247	747	3.0	5	477	789	1.6	4
Inadequate Size and unsuitability of Site	49	447	9.1	18	53	268	5.0	18
Decline of Urban Residential Areas	8	95	11.8	3	0	0	0	0
Undesirable Environment Through Encroachment of Business and Industry	30	326	10.7	1	1	8	8.0	0
Poor Quality and Deterioration of Structure	11	52	4.7	68	20	119	5.9	201

TABLE XV (Continued)

NUMBER OF SCHOOL BUILDINGS AND CLASSROOMS DISTRIBUTED ACCORDING TO PRINCIPAL FACTOR CONTRIBUTING TO ABANDONMENT OF BUILDINGS AS DETERMINED FROM FLORIDA SCHOOL SURVEY REPORTS

	White Schools				Negro Schools			
	Most Important Factor in Abandonment No. Bldgs.	Most Important Factor in Abandonment No. Rms.	Mean No. Rms.	Factor Present but Secondary No. Bldgs.	Most Important Factor in Abandonment No. Bldgs.	Most Important Factor in Abandonment No. Rms.	Mean No. Rms.	Factor Present but Secondary No. Bldgs.
Obsoleteness of Plan and Design	19	121	6.3	45	10	91	9.1	44
Building Not Well Located To Serve Population	20	103	5.1	0	16	55	3.4	0
	384	1891	4.9	140	577	1330	2.3	267

considered inadvisable to attempt to draw any conclusions from Table XV based on refined statistical calculations.

School Membership Too Small.--Frequently appearing in the survey reports are statements justifying recommendations to discontinue school centers and abandon buildings, such as the following: ". . . . pupils would have better educational opportunities at a larger center."[1] "The 26 pupils in grades 7-12 is a completely inadequate number to justify the continuance of those grades here. . . ."[2] "However, neither school is large enough for a satisfactory school program."[3] "Small schools of this size should not be maintained in easy transportation radius of schools of adequate size. It is unfair to the children to give them poor educational advantages when good educational opportunities can be given them at little or no extra cost. Therefore, it is recommended that this school be abandoned and the children transported to Oneco."[4]

Table XV shows that "school membership too small" is the most common factor contributing to the abandonment of school buildings indicated in the Florida school building survey reports. It was judged to be the factor of primary importance in 247 out of 384 cases of recommended building abandonment at white school centers, and in 482 out of 577 cases at Negro school centers.

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[1] Proposed School Plant Program for Lee County, Florida, 1949.

[2] Proposed School Plant Program for Holmes County, Florida, 1949.

[3] Proposed School Plant Program for Indian River County, Florida, 1948.

[4] School Building Survey, Manatee County, Florida, 1947. p. 65.

To say in any particular case that "school membership too small" is a reason for discontinuing a school center implies that it is too small according to some established or accepted standard. The standards accepted by the survey staffs for minimum membership at a school center are set forth in most of the survey reports in discussions such as the following:

> In small schools the number of pupils per teacher is low and consequently the cost per pupil is high. The building and equipment costs per pupil are high if an attempt is made to provide facilities for an enriched program. Special service rooms are particularly expensive in cost per pupil in small schools.
>
> Most school authorities believe that an elementary school center should have as a minimum enough pupils so that no teacher will have to teach more than one grade. This means not less than 180 to 200 pupils in grades 1-6. Only in cases where bus transportation time for pupils would exceed an hour each morning and afternoon should an elementary school with many fewer than 180 pupils in grades 1-6 be considered in justice to the children and the taxpayers. A larger number is desirable, preferably 300 to 500 pupils. In larger schools it is economical to employ a principal who will devote full time to supervision, and it is possible at reasonable cost per pupil to provide better facilities and specially trained teachers for health, physical education, music, and an enriched program. The maximum membership at any elementary center should be determined by the size of the site, the facilities available, and other conditions, but it would probably be no more than 600 to 800 pupils. An attendance of 400 to 600 elementary pupils makes possible a very satisfactory program at reasonable cost.[5]

Thus it will be seen that school membership substantially below 180 pupils in grades 1-6 would bring about the recommendation for the discontinuance of an elementary center and the abandonment of its building, unless it were necessary to maintain the school to avoid an excessive amount of bus travel for many of the pupils. Standards for minimum membership in high school grades are described as follows:

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[5] Proposed School Plant Program for Dixie County, Florida, 1949, p. 3.

> A senior high school of grades 10-12, or 9-12, or a junior high school of grades 7-9 should have a minimum of 300 pupils in average daily attendance. A junior-senior high school of grades 7-12 also requires a minimum of at least 300, and some authorities consider 450 as a more desirable minimum for a six-grade junior-senior high school.
>
> The reason for this minimum is readily seen when one considers the numerous areas of instruction included in a full, up-to-date junior or senior high school program. In addition to the usual academic subjects taught primarily from books, such as English, history and other social studies, and mathematics, a full junior or senior high school program includes the various fields of science, homemaking, vocational agriculture, industrial arts, physical education, commercial subjects, music and art, and perhaps foreign languages. Most of these fields demand teachers with specialized training, and require special facilities such as gymnasiums, laboratories, shops, etc., with the necessary equipment. To hire such teachers and to provide the necessary facilities for a full high school program for a handful of pupils is prohibitively expensive. A small high school with only three or four teachers can offer only the barest and most meager kind of high school experience and pupils suffer as compared to pupils in larger centers which offer full, well-rounded high school programs.[6]

It is to be noted that the standards for minimum size of school membership followed in the Florida survey program are substantially those commonly accepted throughout the nation.[7]

The survey reports sometimes directly relate the factor of "school membership too small" to economy of operation of the schools and saving of the public's money. In comparing costs and program at a large high school (Leesburg) with costs and programs at the other high schools in the county, all of them considerably below the standard in size, the Lake County survey staff stated:

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[6] Ibid., p. 4.

[7] See page 31.

> The operation of small high schools is particularly expensive. The present white per pupil cost for instruction salaries alone for grades 7-12 in Lake County for 1948-49 is as follows: Umatilla, $190; Eustis, $180; Mt. Dora, $168; Tavares, $190; Leesburg, $145; Clermont, $161, and Groveland, $197. . . . An analysis of the program of studies shows that present per pupil cost of Mt. Dora and Clermont would approximate that of Umatilla, Tavares, and Groveland if vocational agriculture were included in the program. Leesburg has the lowest per pupil cost of any high school in the county and it provides the richest educational opportunities. The most expensive high school in the county is Groveland. However, the high school students attending Groveland do not have either as broad a vocational program or as broad a college preparatory program as the students attending Leesburg.
>
> It is estimated that approximately $30,000 annually could be saved in instruction costs alone if the white high schools in Mt. Dora, Tavares, Umatilla, and Eustis were regrouped into one center and the white high schools in Clermont and Groveland were regrouped into one center. This would necessitate some increase in transportation costs but that would be compensated for by improved educational opportunities.[8]

The minimum standards for size of high schools have considerably less significance in the present study than do the standards for size of elementary schools. The reason is that this study is limited to cases of total abandonment of buildings. The discontinuance of a high school center because it is too small would seldom result in the total abandonment of a school building, because almost without exception small high schools are housed in the same buildings with elementary schools which are to be continued.

It is obvious that "school membership too small" given as the reason for discontinuing a school center and abandoning the building is not a simple factor. In any particular case there are several possibilities. Membership may have fallen below the standard as the result of population decline. The membership may be just as big as it has ever been. It may even be growing.

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[8] Proposed School Plant Program for Lake County, Florida, September, 1948, iv-v.

The survey staffs seldom analyze causes for membership being too small in particular cases beyond an occasional passing comment such as, "This community is declining in population. The average daily membership in this school in 1938 was 118 and in 1946 it was 77."[9] In a few cases the survey staffs recognized the termination of the principal economic activity of the community as a cause of membership decline leading to school building abandonment. In practically all such cases the closing, or possible closing, of a sawmill was involved. The following is an example:

> The survey staff, however, received information to the effect that the sawmill . . . . is going out of business and that a pulp mill may be established there. Since the classrooms . . . . are sub-standard in most respects, a new building would be recommended there if concrete evidence were available to show that the pulp mill will actually materialize. . . . If the sawmill ceases operations, a careful study should be given to the situation before any determination is made as to the final disposition . . . . as a school center or as to the construction of additional school facilities there.[10]

In another survey report the staff commented that "Industries based on forest resources are reported to have declined greatly, and may come almost completely to an end before long when all the timber is cut."[11] These comments were made concerning the white and Negro schools respectively in a saw-mill town in that county: "On account of the distance to any other center this school should probably be continued until the enrollment drops to a point where it is not economical to provide a teacher," and "Information received indicates that this school may not have any pupils in the next year or two."[12] The mill in the town finally closed completely, and both white and Negro schools are now discontinued.

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[9] School Building Survey, Manatee County, Florida, February, 1947, p. 36.

[10] Proposed School Plant Program for Taylor County, Florida, 1949.

The significance of "membership too small" as a factor in school building abandonment will be further considered in connection with the studies of representative cases of abandonment reported in Chapter IV.

Inadequate Size and Unsuitability of School Site.—The factor of inadequate size and unsuitability of school site is indicated in the survey reports as contributing to the abandonment of buildings in 49 out of 384 cases of white schools and 53 out of 577 cases of Negro schools as shown in Table XV.

The following quotations illustrate the importance attached to this factor: "The site is level, well-drained, partly improved, but too small for school purposes."[13] "This school occupies an irregularly shaped city block opposite the courthouse and the county jail. It is surrounded on all sides by streets and expansion is practically impossible. The site is completely inadequate and unsuitable for a school of this size."[14] The school "is located on a site consisting of about an acre and a half which is entirely inadequate for a school of any size. This site should be abandoned for school purposes as soon as new high school facilities are available."[15] "The grounds are eroded and partly unusable owing to the steep slope toward a pond behind the buildings. The site is inadequate in size and largely unsuitable for school use."[16] "The one acre site is entirely inadequate and impractical to expand. It is located in the downtown business section . . . . and is surrounded by streets and business properties."[17] Concerning a site of about three acres for a twelve-classroom school, the survey staff for one county stated: "Because this site is bound on one side by a highway and on another by a railroad the . . . . School is . . . . recommended for eventual abandonment."[18]

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[11] Proposed School Plant Program for Osceola County, Florida, 1948.

[12] Ibid.

[13] Proposed School Plant Program for Citrus County, Florida, 1947.

More extensive comments were made in some cases where inadequate and unsuitable sites presented unusual problems:

> The school site consists of about four acres of unimproved, unfenced, ungraded land on a dirt road . . . . The level area

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[14] Proposed School Plant Program for Clay County, Florida, 1949, p. 30.

[15] Proposed School Plant Program for Lee County, Florida, 1949.

[16] Proposed School Plant Program for Madison County, Florida, 1948, p. 26.

[17] Proposed School Plant Program for Putnam County, Florida, 1949, p. 26.

[18] Proposed School Plant Program for Orange County, Florida, 1948.

> is very limited, and the use for school purposes of the rest of the land is impractical because of ditches, ravines and slopes. . . . It is most unfortunate that the new building was constructed at such a restricted and unsuitable site, which is so limited in usuable area that no further construction should be done there. This mistake cannot be corrected, but it should not be made worse by further building. Needed additional building should be done at a new suitable site of about fifteen acres . . . .[19]

Speaking of a three-quarter acre site for a high school of 445 students, another survey staff declared:

> The site is completely surrounded by business properties to the south and east and residential properties to the north and west. The Board could hardly have found a poorer site on which to locate this building. This location was a tragic mistake. There is not enough land available to contain the additional buildings needed and there is practically no space available for play activities . . . .[20]

In another case the comment was made that:

> The survey staff considers it very doubtful that the present site could be developed satisfactorily. It would probably be cheaper to acquire a new site . . . . A very serious and costly error was made when the present buildings were constructed on a plot totally unsuited for school purposes. This is the poorest site that the survey staff has yet found in the state for a school of this size.[21]

The standards for school sites accepted by the survey staffs in making their recommendations are indicated in the following quotation:

> A desirable school site should be attractive in appearance, spacious enough for all educational and recreational activity to be carried on without crowding, easily accessible to the pupils, and located away from busy thoroughfares,

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[19] Proposed School Plant Program for Escambia County, Florida, 1949, p. 63.

[20] Proposed School Plant Program for Okaloosa County, Florida, 1948.

[21] Proposed School Plant Program for Pasco County, Florida, 1947.

> industrial establishments, or any other features which are hazardous or distracting in nature. Sites should also be of such size and shape as to make allowance for any expansion of building facilities, service areas, and other educational use areas, which may become necessary to provide for future population growth.
>
> . . . . The National Council on Schoolhouse Construction recommends the following site standards: for elementary schools a minimum of five acres plus an additional acre for each 100 pupils of ultimate enrollment; for secondary schools a minimum site of ten acres plus an additional acre for each 100 pupils of ultimate enrollment. For a full and enriched program much more space is desirable.[22]

While recognizing that minimum standards for size of school site were impractical to apply in many circumstances, the survey staffs generally accepted and their reports advocated in many instances the standards proposed by the National Council on Schoolhouse Construction as indicated above.[23] The standards required for new school sites by the Florida School Code are not greatly different, though somewhat lower for small schools and for larger schools. The maximum number of acres required by Florida law for a new school, not matter how large, is eleven acres.[24]

Consideration of inadequacy of size of school site as a cause of school building abandonment suggests that the factor is not a simple one. After all, most of the sites were considered adequate at the time the buildings were built on them, and they are just as large now as they ever were. What changes have occurred which now make inadequacy of site a cause for the abandonment of the school building? This question will be considered in the studies of representative cases reported in Chapter IV.

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[22] Proposed School Plant Program for Bradford County, Florida, 1949, p. 8.

[23] National Council on Schoolhouse Construction, Guide for Planning School Plants, 1949 Edition, pp. 17-34.

[24] Florida School Laws, 1946, Section 235.20.

Decline of Urban Residential Areas.--Recognized as a factor in school building abandonment, especially in larger cities, is the decline in population of residential areas and their conversion to commercial and industrial use. This is an easily observed phenomenon in any large city, and is referred to in the review of literature in Chapter II.[25] Though the cases reported in the surveys are not numerous they involve fairly large buildings and a considerable number of classrooms. This was judged to be the most important factor in the recommended abandonment of 8 white school buildings out of 384, as shown in Table XV. No cases where this factor appeared important were reported among the Negro school buildings recommended for abandonment.

A school building constructed to serve a populous residential neighborhood in a city will gradually become vacant as children of residents complete their schooling, and as former family homes become rooming houses in which few children are found, or are replaced by commercial and industrial establishments. In such cases younger families with school age children usually locate elsewhere, and eventually the school building must be abandoned for lack of children. The survey staffs recognized this in such statements as the following: "This school is in the business district and in an area which would be expected to have a declining school population. It should be continued for quite a number of years, but school authorities should begin to look toward its eventual replacement."[26] "There is no room for further expansion of school plant. However, it is conceivable that the enrollment will decrease as commercial and industrial enterprises make inroads on the area."[27] The school "is in an industrial area, has a very limited site, and serves a declining population in its vicinity."[28] "The five-acre site is . . . . located in an industrial area. The south boundary is bordered by a large packing plant and the west side by a railroad and another large packing house. No residential area is located very near the school."[29]

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[25] See p. 26.

More extended discussions of situations involving decline of residential areas and encroachment by commercial, business, or industrial activities, are given in some reports. Following is a typical comment:

> The . . . . school at the time it was built was well located to serve the residential areas on the southern and eastern parts of the city. These residential areas have been pushed out, however, by the expansion of the business section and by the development of the capitol center. The . . . . school itself has a site which is much too small and cannot be expanded. It is in the way of the expansion of the capitol center, and it is very probable that eventually it will be absorbed into the

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[26] Proposed School Plant Program for Lee County, Florida, 1949.

[27] Survey and Study of the Physical Properties and School Plant of the Public Schools of Duval County, Florida, 1945. Part II, p. 2.

[28] Proposed School Plant Program for Orange County, Florida, 1948.

[29] Proposed School Plant Program for Marion County, Florida, 1948.

> capitol center development. Therefore, the school board should look forward to the possibility of replacing this center in the not too distant future . . . .[30]

In discussing a school which had been expanded to double its original size only twenty-fours previously in one of Florida's largest cities, whose attendance area was being invaded by the expanding downtown business and commercial area, and whose membership had declined sharply, another survey staff said:

> This school is located in a declining population center. It had an elementary enrollment of 550 in 1936-37 and it has declined to 281 in September 1946. This decline has been due largely to the decline of the cigar manufacturing industry. It is recommended that this center be classified as a temporary elementary center for grades 1-6. . . .
>
> . . . .
>
> The building does not score enough to justify its permanent retention. When it is abandoned the Macfarlane Park Elementary School should be enlarged sufficiently to take care of the children remaining in the area.[31]

This comment on another school with a capacity of 570 pupils and an enrollment of 479 in the same city appears in the same report:

> The site is located on the southern edge of the population to be served, and the white population center is gradually shifting northward . . . .
>
> . . . .
>
> This building should be continued for the present as a temporary center for grades 1-8 for whites. If the population shift continues it may be found practical at a later date to use it as an elementary center for Negroes . . . .[32]

In another of Florida's largest cities the possibility of eventual abandonment of a large school building because of a declining residential area and the encroachment of the business section was pointed out:

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[30] Proposed School Plant Program for Leon County, Florida, 1949.

[31] School Building Survey, Hillsborough County, Florida, 1946, p. 43.

[32] Ibid., pp. 52-53.

> The site consists of three or four city lots (approximately 1.5 acres) most of which is covered by the building. Adequate play area is available, however, in a city park just across the street. The site is being slowly crowded by the growing business area adjacent to it. It may some day cease to be desirable school property.
>
> . . . .
>
> This school is classified as a probably temporary center for grades 1-6. It is in an area in which school population probably will not increase and perhaps will decline. . . .[33]

Undesirable Environment because of Encroachment of Business and Industry.--The factor of disturbing, distracting, and unattractive elements in the neighborhood and immediate vicinity of a school is indicated in the survey reports as an important cause for the abandonment of the building. Table XV shows that this factor seemed to be involved in 30 out of 384 cases of abandonment of white schools, and in one of the 577 cases of Negro schools.

Comments such as these are typical in the survey reports: The school is "located between the main East-West traffic arteries. Street noises are very disturbing to the school program."[34] "The site consists of two acres situated in a thickly populated area near the expanding business section of the city."[35] "The site is a sloping shady area set in the intersection of two railroads and two truck highways. . . . Its location is definitely bad."[36] The site "is entirely inadequate both as to size and location. It is situated directly in the corner of two very busy streets."[37] "The . . . . School is located on a three acre site bounded by busy streets and practically in the center of the business district . . . . The size and location of this site are unsatisfactory for school purposes . . . . Eventually, the present plant should be replaced by an up-to-date building at a more suitable and adequate site."[38] "This plan recognizes that the present junior high school is located . . . . at the edge of the business and industrial area, on a heavily traveled arterial street . . . ."[39] "The site is unsatisfactory for a high school center. The area is small and the location too near hazardous traffic."[40] The site "could be enlarged slightly but because of its location at the intersection of two busy thoroughfares could not be made suitable for school use."[41] "The site is bounded by two busy streets and is being encroached on by the business district. . . . The present site and plant should be considered as temporary and ultimate removal to a new site should be planned as soon as possible."[42] "The . . . . School is located on the south edge of a very small and inadequate site . . . . enclosed on the north by a city-owned playground, on the east by U. S. Highway No. 1, on the west by the Florida East Coast Railway, and on the south by a commercial enterprise."[43]

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[33] Proposed School Plant Program for Dade County, Florida, 1948.

[34] Proposed School Plant Program for Alachua County, Florida, 1947.

[35] Proposed School Plant Program for Polk County, Florida, 1947, p. 18.

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[36] Ibid., p. 27.

[37] Proposed School Plant Program for Palm Beach County, Florida, 1948, p. 23.

[38] Proposed School Plant Program for Orange County, Florida, 1948.

[39] School Building Survey, Manatee County, Florida, 1947, p. 29.

[40] Proposed School Plant Program for Lee County, Florida, 1949.

[41] Proposed School Plant Program for Dade County, Florida, 1948.

A more extensive description of a case where undesirable environment for a school was created by the encroachment of commercial and industrial enterprises was given in one report:

> The site is located on a railroad track and in the business district of the city. It contains approximately one acre and a new industrial building is under construction on the lot to the north of the present site. This industrial building will probably prove quite annoying and make the site quite inadequate for school purposes.
>
> . . . .
>
> It is recommended that this building be used as a temporary center for grades one through six.
>
> Since the present site is considered a temporary one, no major improvements or additions are considered advisable at this time. It is probable that the new industrial plant now being erected on the adjacent site will prove so distracting that the procurement of a new site and the replacement of the present building will be found to constitute the only feasible solution.[44]

In practially every case where "undesirable environment" appears as a factor contributing to the abandonment of a school building, it is associated with the factor of "inadequate size of site." Furthermore, this factor is usually found in cases of buildings constructed more than twenty-five years ago, which have stood long enough for substantial changes to take place in the neighborhoods where they were built. Naturally, this factor rarely occurs in rural areas where it is unlikely for seriously disturbing and distracting elements to occur next to school buildings, and where sites usually are, or can be made, more adequate in size.

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[42] Proposed School Plant Program for Broward County, Florida, 1948.

[43] Proposed School Plant Program for Brevard County, Florida, 1947.

[44] School Building Survey, Hillsborough County, Florida, 1946, p. 49.

As suggested in some of the quotations given, the change which creates the factor of "undesirable environment" appears almost always to be encroachment of industrial and commercial activities into the area occupied by the school. Very rarely does it appear that a school building was originally constructed where there were seriously disturbing elements in the environment at the time the school was built, though there are some exceptions in the case of schools in highly congested urban areas, particularly slum areas. The factor of "undesirable environment" resulting from encroachment of industrial and commercial establishments is naturally quite often associated with the factor "decline of residential areas" as a cause of school building abandonment.

In making recommendations involving the environment of school sites, the survey staffs advocated and followed the standards for school sites set forth by the National Council on Schoolhouse Construction. These standards are stated in these words:

> The environment of every school should provide to the greatest possible degree: (1) safe and healthful conditions for the pupils and teachers while on the school grounds, in the building and in the immediate neighborhood of the school; (2) freedom from disturbing noises such as those resulting from heavy truck, automobile, railway, and airplane traffic

> and by fire sirens and factory whistles; (3) freedom from obnoxious odors; (4) surroundings pleasing to the eye, that will tend to create a feeling of pride, happiness, and contentment.[45]

Poor Quality and Deterioration of Structure.—Frequently appearing in the Florida survey reports as a factor contributing to the recommended abandonment of a school building is the poor physical condition of the structure. Typical comments are: "The main building is a brick structure in very poor structural condition and in a poor state of repair."[46] "The entire building inside and outside is rotting and dilapidated."[47] "Present buildings are in such poor condition that they can be considered only temporary facilities."[48] "Both brick buildings have bad external wall cracks and are structurally unsound."[49] "There are cracks in the outside walls and the building generally is in poor condition."[50] "The main building is an obsolete old brick structure in bad condition and not worth repairing."[51] "The gross structure and interior structure are inferior. Tie rods indicate that structural difficulty has been experienced in the past."[52]

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[45] National Council on Schoolhouse Construction, Guide for Planning School Plants, 1949 Edition, p. 17.

[46] Proposed School Plant Program for Suwannee County, Florida, 1948.

[47] Proposed School Plant Program for Seminole County, Florida, 1948.

[48] Proposed School Plant Program for St. Johns County, Florida, 1948, p. 37.

[49] School Building Survey, Pinellas County, Florida, 1947, p. 21.

[50] Ibid., p. 85.

[51] Proposed School Plant Program for Levy County, Florida, 1947.

[52] School Building Survey, Hillsborough County, Florida, 1946, p. 145.

More detailed comments concerning structural condition of the buildings are given in some cases. These are some examples:

> The three-story brick building . . . . is . . . . in very poor structural condition. Major cracks appear in the walls and floors are shaky. It has been felt necessary to support one wall with steel beams and tie-rods. Leaks are reported in the . . . . roof.[53]

In the same report another building is described and its condition discussed in these terms:

> The main building is a one-story, frame building resting on piers and roofed with asbestos shingles. It is in very poor condition. Sills are rotted and infested with termites, the roof leaks, siding is rotted and broken, and downspouts have rusted away. While originally this was a well-built building of standard frame construction, it has now deteriorated so badly that it is questionable whether the great expense of putting it into good condition would be worthwhile.[54]

One of the survey reports is very emphatic about what should be done with a greatly deteriorated two-story brick building:

> It is in a bad state of repair. Exterior walls are badly cracked in many places. The building is unsafe for school use, and should be abandoned and razed as soon as space can be provided elsewhere. No major expenditures are recommended on this building at this time but instead it is emphasized that it should be abandoned as soon as possible and when abandoned should be razed and moved from the site.[55]

The poor condition of a frame building housing a Negro high school in the western part of the state is graphically described:

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[53] Proposed School Plant Program for Osceola County, 1948.

[54] Ibid.

[55] School Building Survey, Columbia County, Florida, 1947.

> The high school floors are about gone, the window frames and sash are rotten, glass is out, the building is sagging in places, the weather-boarding is very old, the tin roof is rusting, the rooms are dark, and the building is generally unsuitable for high school purposes. . . . The classrooms vary from poor to untenable . . . .[56]

In another report the survey staff says:

> This two-story masonry building erected in 1914 is in very poor structural condition. Termites have damaged the sills and floor joists. Inadequate floor ventilation has permitted termites to infest this building. The roof leaks, and the window sashes and concrete plates need repairing. . . .
>
> . . . .
>
> This building is so obsolete in design and in such poor structural condition that it is not worth repairing.[57]

"Poor quality and deterioration of structure" as a primary factor in the abandonment of school buildings is comparatively infrequent. Only 19 out of 384 white school buildings and 10 out of 577 Negro school buildings were judged to have been recommended for abandonment primarily on account of this factor, as shown in Table XV. However, it was judged to be a secondary factor in the case of 68 white school buildings and 201 Negro buildings recommended for abandonment, showing that a large proportion of buildings recommended for abandonment were seriously deteriorated, though deterioration by itself was infrequently the cause of abandonment.

No attempt is made in this study to distinguish between cases of "poor quality and deterioration of structure" caused by defects in the original design and by poor workmanship and materials, and those caused by lack of proper repair and maintenance service over a period of years. As may be seen from the quotations given, it is relatively easy in some cases to distinguish between these two types of causes. Obviously, the appearance of cracks in the walls of a masonry building necessitating shoring with steel beams and tieing with steel rods is the result of defects in the structural design of the walls and the foundations, or of poor material and workmanship in construction, or both, while other types of defects result from lack of proper repair and maintenance. However, in most cases it is probably impossible to determine whether original deficiencies in the construction, or lack of proper maintenance was the more important cause of deterioration. It is unnecessary to point out that either may be an important cause of "poor quality and deterioration of structure."

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[56] Proposed School Plant Program for Walton County, Florida, 1947.

[57] Proposed School Plant Program for Union County, Florida, 1948.

Obsoleteness of Plan and Design.—Without specifically defining it, the Florida survey staffs often give "obsoleteness of plan and design" as a reason for abandoning a building, as shown in these quotations: "The structure seems to be fairly sound, though . . . . the interior is dingy, worn, and obsolete in arrangement."[58] "These pupils are housed in an ancient two-story frame building containing twelve classrooms . . . . It is recommended that this building be razed . . . . It is further recommended that the present obsolete brick and frame buildings on the Cookman #145 site be razed and a new modern school built . . . ."[59] ". . . . the building is so obsolete in design that it should be abandoned as soon as possible."[60] "The elementary school and part of the junior high school grades are housed in two obsolete brick buildings . . . . the buildings should be retired from use."[61] "This solid brick building erected in 1913 is in sound condition. It is a three-story structure, and although it has been well maintained is obsolete. The auditorium on the third floor is undesirable."[62] "The building is a two-story brick structure erected in 1922. It is poorly designed and poorly arranged . . . . The building is so obsolete in design as to make it impossible to remodel it into a desirable building."[63] "The building housing grades 4 through 8 is obsolete and so poorly arranged that it will be impossible to make it a desirable building."[64] "This building is so obsolete in that it can be considered as a temporary facility only."[65] "The buildings are obsolete in design."[66] "The school plant consists of . . . . a one-story concrete block building with wooden interior of obsolete design."[67]

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[58] Proposed School Plant Program for Clay County, Florida, 1949, p. 31.

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[59] Survey and Study of the Physical Properties and School Plant of the Public Schools of Duval County, Florida, 1945, Part I, p. 48.

[60] Proposed School Plant Program for Polk County, Florida, 1951, p. 8.

[61] Ibid., p. 18.

[62] Proposed School Plant Program for Polk County, Florida, 1947, p. 11.

[63] Ibid., p. 14.

[64] Ibid., p. 32.

[65] Proposed School Plant Program for Union County, Florida, 1948.

[66] School Building Survey, Pinellas County, Florida, 1947, p. 28.

[67] Ibid., p. 111.

The factor of "obsoleteness of plan and design" contributing to the abandonment of a building is indicated in a considerable number of cases where the term "obsolete" is not used. For example, this statement is found in one report: "The building is a three-story brick structure with interior partitions of frame. The structure is 32 years old and is of inferior type of design and construction."[68] Of another building the same survey staff said: "An old one story building constructed about 1915 is located on the southeast corner of the lot. It is an antiquated, unattractive structure."[69] Another building is described as "unattractive and of antiquated design."[70] Another report contains the statement: "A two-story brick building constructed in 1921 houses grades 4-12. This building is not well adapted to present school needs but is in a fairly good state of repair."[71]

Table XV shows that 19 out of 384 white school buildings and 10 out of 577 Negro school buildings were judged to have been recommended for abandonment by survey staffs primarily because of "obsoleteness of plan and design." Most were fairly large buildings.

Nowhere in the Florida survey reports is found a description in specific terms of the qualities, or combination of qualities, which may cause a building to be considered obsolete. However, practically every report contains a section pointing out the necessity of planning new school buildings in such a way as to provide the best situation for carrying on a modern school program with suitable provision for the health, comfort, and safety of the children and possibilities of growth in membership and future developments in the educational program. One-story construction is sometimes specifically recommended.

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[68] School Building Survey, Hillsborough County, Florida, 1946, p. 76.

[69] Ibid., p. 120.

[70] Ibid., p. 122.

[71] Proposed School Plant Program for Glades County, Florida, 1948.

Any school building will be planned and designed according to standards accepted by, or imposed upon, the architect and the school officials responsible for its construction. These standards will be affected by public opinion and taste and by provisions of law. To some extent at least the plan and design of a school building will be determined by the activities and the kind of teaching prevalent in schools at the time it is built. Ideas and standards accepted by the planners of the building as to what is good and adequate in heating, lighting, sanitation, and safety, will be incorporated into the building. All of these things will be adjusted to, and shaped by, the amount of money that is available. In the course of time the conception of what the plan and design of a school building should be is likely to change; when this occurs a building will be considered obsolete.

From survey reports descriptions of buildings referred to as obsolete can be drawn a picture of a typical school building recommended for abandonment because of "obsoleteness of plan and design." Such a building was constructed prior to 1920, though there are a few cases where buildings described as "obsolete" were built in the nineteen-twenties. It usually has two stories and often is a three-story structure. The outside walls are of brick, or other masonry, and the interior structure is wood frame with plastered walls. The main floor contains a very large entrance hall, and much other space is wasted throughout the building in excessively wide corridors. Stairways are usually inadequate, sometimes only one for a large two- or three-story building. Stairways are supplemented by one or more exterior fire-escapes, often inaccessible to the children. Classrooms may be of very generous size, but are almost always poorly lighted; glass area is inadequate, tops of windows are considerably below the ceilings of the rooms, and wide mullions between windows and arrangement of windows on two sides of corner rooms make a poor distribution of light. Often the windows are placed on the short side of a large room with the result that very little light reaches the desks of pupils fartherest from the windows. Unless recently equipped with fluorescent fixtures, artificial lighting of classrooms is provided by one electric fixture, often just an electric bulb suspended by a cord. Heating is by means of stoves, sometimes jacketed. An auditorium will often be found on the second floor, or even on the third floor, with completely inadequate facilities for egress if a fire should occur while it is in use. Toilet rooms are in the basement, or in some makeshift space on the main or upper floors. In spite of a large amount of unused floor space in the building, there is practically no storage space except a closet under the stairway. A small office may be provided, often on the second floor, or opening on a stair landing.

In many cases "obsoleteness of plan and design" of a building as a factor in its abandonment is associated with the factors of "inadequate size and unsuitability of site," "undesirable environment," and often with "deterioration of the structure." In all cases of recommended abandonment involving "obsoleteness of plan and design" it was deemed impossible to modernize and rehabilitate the structure into a safe, comfortable building suitable for the kind of school program now desired.

Building Not Well Located to Serve Population.--In several places survey reports indicate as a reason for abandoning a building the fact that it is not well located to serve the area in which it is placed. Table XV shows that survey staffs seemed to consider this factor of primary importance in 20 out of 384 cases of white schools and 16 out of 577 cases of Negro schools.

Quotations from survey reports illustrating this factor follow: "Most of the pupils in this school should be accommodated at the proposed new elementary center . . . . since the . . . . School is not located near where most of the pupils live."[72] "New facilities should probably be provided at a site more centrally located for the bulk of the population than is the present school plant."[73] "Plans, with which this report agrees, are being developed to provide . . . . ultimate removal of the . . . . plant to a new site, located more nearly toward the center of the population in the area served. It appears that factors of growth and transportation time will determine the wisdom of this decision."[74] ". . . . the present junior high site is located at the extreme north of the pupil population area . . . ."[75] "The present site is not well located with respect to the adjacent elementary schools nor to the center of its pupil population area."[76] "The poor location of the Harris School and the somewhat comparable poor location of the Norwood School to the south of it indicates that . . . . plans should be made for the abandonment of both buildings. . . ."[77] The . . . . school site is poorly located. It is not strategically centered to its population area . . . ."[78]

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[72] A Survey of the Public Schools of Sarasota County, Florida, 1951, p. 253.

[73] Ibid., p. 254.

[74] Proposed School Plant Program for Sarasota County, Florida, 1948.

Where the factor of improper location of a building is pointed out by a survey staff, it is recognized that a school is needed to serve an area, but that the existing building is so unsuitably located with respect to the residences of the children that it should be abandoned and replaced. Unlike cases of abandonment resulting from population changes there is usually no population decline in the area and there may even be marked growth.

The average annual cost of transporting a school child in Florida is approximately $32. If schools can be so located as to reduce substantially the number of pupils transported, proportionate substantial savings can be realized in current expenses. Even though transportation may not be involved in the case of urban schools, the reduction of walking distance of children across dangerous intersections is desirable.

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[75] School Building Survey, Manatee County, Florida, 1947, p. 29.

[76] School Building Survey, Pinellas County, Florida, 1947, p. 69.

[77] Ibid., p. 70.

[78] Ibid., p. 106.

School Buildings Not County-Owned.--Table VII shows that 7 white school buildings and 152 Negro school buildings recommended for abandonment in the Florida survey reports were not owned by the school system. With very few exceptions these buildings were makeshift quarters housing Negro schools, typically characterized in the following terms:

> The situation is so deplorable in many of the Negro school centers that the construction of classrooms for Negro children now housed in churches and lodge buildings not owned by the county should have priority over all other building. None of these buildings has desks or tables at which children can write and do other school work. Small elementary children have no place to sit but on rough home-made benches of adult size. Pupils must kneel or sit on the floor in order to write on the pew seats.[79]

A very few privately owned buildings described in the surveys provided reasonably satisfactory school facilities. Most of these were in company-owned villages in the phosphate mining area of central Florida. A few other fairly satisfactory privately owned school buildings belonged to lumber companies in sawmill towns.

Careful reading of the survey reports suggests that the mere fact that a school building was privately owned had little to do with its recommended abandonment. Even if county-owned, it would be abandoned in most cases because it was unfit for use, or because the prospective membership was too small. In one case the survey staff recommended that a satisfactory privately owned school building be purchased for continued use. This was the Hungerford Negro School in Orange County, owned by a philanthropic trust which operated it for many years as a boarding school.

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[79] Proposed School Plant Program for Madison County, 1952, p. 6.

The boarding school declined, and its operation was taken over by the county school board, which made it a public school with the plant under lease.[80] The plant fitted into the long term school development program of the county and has now been acquired by the county board.

Obviously, the discontinuance of a school housed in a privately owned building does not involve any loss of publicly owned capital assets, though replacement of the building with publicly owned facilities involves considerable expenditure. Therefore, private ownership of a building used for school purposes was not of itself considered a factor in the abandonment of school buildings on the basis of the data in the survey reports and is not listed in Table XV.

This chapter has presented an overall survey of the reasons appearing in the Florida school building survey reports for recommending abandonment of 961 buildings. It is difficult to evaluate the significance of the respective factors contributing to the abandonment of buildings from an overall survey. Such a method tends to make the factors appear as simple, separate entities. Observation and logical reasoning suggest that single factors such as have been determined from the survey reports are often complex; furthermore, it is often no single factor but a combination of factors which brings about the abandonment of a school building. In order to get a clearer picture of the operation of factors contributing to the abandonment of school buildings detailed studies of representative cases are presented in the following chapter.

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[80] Proposed School Plant Program for Orange County, Florida, 1948.

CHAPTER IV

REPRESENTATIVE CASES OF SCHOOL BUILDING ABANDONMENT IN FLORIDA

More intensive and detailed analysis of factors contributing to the abandonment of school buildings than appeared in the survey reports seemed to be necessary for the purposes of this investigation. Careful study of specific cases gives an insight into some factors contributing to the abandonment of school buildings which cannot be obtained from the survey reports.

The examples presented in this chapter were selected because each is typical of a considerable number of cases and also well illustrates some particular factor, or combination of factors, contributing to the abandonment of a school building. The number of case studies of each type of school has no relationship to the proportion of cases of that type among the total number of cases covered by this investigation; for example, a majority of the case studies are concerned with rural schools, not because rural schools make up a majority of cases in the investigation, but because there appeared to be more variation in factors contributing to abandonment in the case of rural schools than among urban schools.

Data for the study of these cases were obtained from State Department of Education records, from official reports, from correspondence and interviews with state and county school officials and local citizens, as well as from the survey reports.

Abandonment Caused by Obsolescence Combined with Other Factors

The first case to be described involves the prospective abandonment of the buildings housing the Madison Elementary School, in Madison, Florida. This case well illustrates the fact that a combination of factors are often involved in the abandonment of a school building. Information extending back to the construction of the building was available. Therefore, this case is presented at some length.

The older of the two buildings housing the Madison Elementary School was built about the year 1908 on a site near the edge of the county seat town of Madison. A school had stood on this site since before the Civil War. The unpaved street toward which the school faced was the principal road leading from Jacksonville to Tallahassee and on to Pensacola. Before the days of the railroads it was one of the principal avenues of communication between east and west Florida, but in the early days of the present century carried little traffic except the wagons of farmers going to and from the plantations in the country. The school was built close beside the road, where passers-by could see the four white columns of its portico gleaming against the red brick.

The second building was constructed about the year 1913, away from the road, approximately fifty feet north of the first building. The two buildings together housed elementary and high school grades for several years, until bonds were voted in the middle nineteen-twenties to build a new high school building on the other side of town. When the high school grades first moved out the elementary grades had more than enough rooms in the two buildings.

These two buildings were planned and built according to accepted standards of school plant construction in the first decade of the present century. The two-story construction saved roof and foundation area, and the white columns of the portico were in the best architectural tradition of the South. In the first building a single wooden stairway led to the second floor, but a tubular chute opening from one of the rooms was provided through which the children, it was believed, could slide to safety in case a fire blocked the stairway.

The newer building had an auditorium on the second floor and classrooms on the first floor. The architect who designed this building evidently had no fear that a fire would ever start in its wood frame interior. The main stairway leading to the second-story auditorium was narrow, and another stairway leading to the back of the stage was even narrower, and almost inaccessible to the audience in case of emergency.

All of the classrooms were quite large and the ceilings were high, which contributed to comfort in hot weather but made it difficult for the hand-fired, wood-fueled or coal-fueled stoves to heat the rooms comfortably in cold weather. The width of the rooms, combined with the wide brick mullions between the windows, meant that very little light reached the desks of the pupils fartherest from the windows. The corner rooms with windows on two sides had more light, but it was likely to glare uncomfortably into the eyes of the children. Electric lights in the ceilings made it possible to come into the rooms at night and find one's way around, but contributed little to illumination on dark, cloudy days. To keep the dust down it was felt necessary to oil the floors every year or so, till they became almost jet black in color, helping make the rooms dark and cheerless and softening the wood till it splintered.

In the two buildings there were thirteen classrooms and a small office. One of the classrooms was equipped and used as a library. Toilet rooms were provided in both buildings but the makeshift space was rather poorly lighted and ventilated. A large basement space in the newer building has recently been used for music practice and other miscellaneous purposes.

The property on which these two buildings were built consisted of two acres of land which sloped sharply toward a rather deep depression. This depression and an adjoining large brick building of a long discontinued former normal school made it impossible to expand the usable area of the site. Thus there was very little level ground for play and outdoor school activities in which children might engage. When the buildings were new this probably mattered comparatively little, since play and other outdoor activities were regarded as largely outside the province of the school program. Vacant lots were available not too far away on which the larger boys could play baseball.

With the passage of time there occurred a considerable number of changes which affected the Madison Elementary School. The clay surfaced street in front was paved with concrete and became U. S. Highway 90, one of the nation's principal transcontinental highways. The farmers' wagons and other horse-drawn vehicles of a small town and an agricultural county were succeeded by heavy trucks and diesel-engined semi-trailers, whose thundering roar and noxious fumes distracted pupils and teachers in the rooms nearest the highway. Speeding cars of tourists and of business men hurrying back and forth between Florida's capital and Jacksonville, one of its largest cities, were reluctantly--and far from invariably--slowed down in response to school zone signs and safety patrols. Parents justly had a concern for the safety of their children going to and from school, or chasing a ball which might escape from the limited playground.

Teachers and school authorities came to believe the mounting evidence that if a child is to be taught effectively the teacher must be concerned with more than just the books he might be forced to study in class. Pupils should be given opportunities for physical and social development on a playground in carefully planned and supervised activities. Some teachers found that small children learned much about natural science by studying growing things in a school garden. These things required a considerable amount of ground, and the school site was only two acres, partly occupied by the buildings and partly sloping rather steeply. Furthermore, it was observed that children who left home early on a school bus with a biscuit in a paper bag for lunch often seemed most listless and uninterested in their school work. The relief programs of the nineteen-thirties gave impetus to the idea that school children should have available a hot nourishing lunch at school at the lowest possible price. Fortunately, space was available in the nearby former normal school building and there a lunchroom was established to be run as a part of the activities of the school.

The Madison Elementary School grew in membership, and the ample space left when the high school grades moved to their new building was gradually filled up as small rural schools in the Madison area were consolidated and as more families sent their children to school longer and more steadily. Finally, the high war-time and post-war birthrate added nearly 75 pupils between 1945 and 1951. All vacant rooms were put in use, and only by discontinuing use of the library could any additional teachers be added without new construction. In September, 1951, the membership was 371 in grades 1-6, an average of 28.4 pupils per classroom.

The public's standard of what provisions should be made for the comfort and safety of children was another thing which changed. The new high school building had steam heat and it was easy to observe the contrast between the comfort enjoyed by the high school students and the stuffy uneven heating by the iron stoves in the old elementary buildings on cold, damp, winter days. Articles and advertisements in popular magazines emphasized the importance of proper lighting for work involving the use of the eyes. Some people began to be concerned about the safety of the children in the old buildings with their wooden stairways, wooden interiors, and inadequate fire escapes.

The roofs had been kept in fairly good repair over the years, and the brick walls appeared as straight and sound as on the day the bricks were laid. However, a settling of the floor of the auditorium was noted, which gradually became worse. Examination of the structure a year or so ago showed that termites had invaded the supporting timbers, some of which had given way and allowed the floor to settle. Some alarm was felt for the structural safety of this building, but it proved possible to shore up the settled floors, replace the termite and rot damaged timbers, and put the structure in safe structural condition for a couple of thousand dollars.

In 1951 the old normal school building adjoining the school, which housed the school lunchroom was acquired by the Rural Electrification Administration for use as an office and service headquarters. The school faced the loss of its lunchroom space in the near future. Furthermore, some of the ground formerly used by the school for play area was fenced off to make a storage yard for trucks and electrical supplies.

The Madison Elementary School buildings have been recognized as unsatisfactory for at least a decade. The report of the comprehensive survey of 1942 said: "The elementary buildings should be replaced with a modern structure when finances permit."[1] The 1948 survey report states: "The present buildings can be used for a number of years, but they have served their useful life and the school board should begin to plan their eventual replacement."[2] The report of still another school building survey made in February, 1952, discussed the matter in some detail:

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[1] School Program for Madison County, Florida, 1942, p. 96.

[2] Proposed School Plant Program for Madison County, Florida, 1948, p. 27.

> It would require a very considerable amount of money to put these buildings into reasonably satisfactory condition for school use. Central heating would be required, high intensity fluorescent fixtures would be necessary for good lighting in the classrooms, and considerations of safety would demand extensive alterations, including probably four new fire escapes. A new lunchroom would have to be built. Expenditure of thousands of dollars would still leave this an unsatisfactory school plant because the site is entirely inadequate for a modern elementary school program and the necessary facilities for it. The busy highway constitutes a danger to the children as well as a noise nuisance. For these reasons it is recommended that the present plant and site of the Madison Elementary School be abandoned . . . .[3]

The 1952 report gave the replacement of the Madison Elementary School buildings a high priority among the building needs of the county, second only to classrooms to house Negro pupils "attending school in churches and lodges."[4] With funds available under the Minimum Foundation Program school authorities plan to replace these buildings quite soon.

A complexity of factors is involved in the abandonment of the Madison Elementary School buildings. These factors may be analyzed as follows:

1. The buildings on their small, inexpansible site are obsolete. This means that it is not possible to carry on a satisfactory modern elementary school program in them. It means, furthermore, that the buildings do not conform to present standards for the health, comfort,

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[3] Proposed School Plant Program for Madison County, Florida, 1952, p. 24.

[4] *Ibid.*, pp. 9-10.

and safety of the children with respect to heating, lighting, and exits in case of fire.

It is true that some of the deficiencies of the building could be corrected by extensive rehabilitation. Central heating, fluorescent lighting, and proper window blinds could be installed. The rooms could be improved greatly by redecorating the walls and ceilings and refinishing the floors. Toilet rooms could be tiled and otherwise modernized. Stairways might be rebuilt and rearranged and several fire escapes installed to improve safety conditions in case of fire. However, it is probable that an attempt satisfactorily to rehabilitate the buildings would cost at least $50,000, which is a substantial part of the cost of an entirely new modern building of the same capacity.

2. There is some deterioration of the structure of the buildings in addition to the obsolescence mentioned above. This is evidenced by uneven floors and the repairs which were recently made on the north building. However, deterioration does not appear to be a major factor in the abandonment of the buildings. Masonry walls appear perfectly sound and structural framework is of high quality virgin pine timber. The deterioration could probably be fully corrected in a program of rehabilitation for an amount which would be a very small fraction of the cost of replacing the buildings.

3. Even if the buildings were fully repaired and rehabilitated, the problem of the limited site, hemmed in by a busy highway, the Rural Electrification Administration building, and a deep depression would still remain. No space is available to build the necessary new lunchroom

or any additional classrooms, which will probably be needed soon. There is no way at the present site to escape from the noise nuisance and the safety hazards of the busy highway, nor any way conveniently to gain access to sufficient level ground for the outdoor activities of a modern educational program.

One might speculate that if the present buildings were on a well-located, level site of ten to fifteen acres, it might be worthwhile to try to modernize the buildings and use them for another twenty-five years or so. Fifty thousand dollars to provide comfort and safety in thirteen reasonably satisfactory classrooms for twenty-five or more years might be a good investment. The classrooms themselves could be made as good as hundreds of classrooms which will be used in the state for many more years. If the site were adequate and suitable, a lunchroom and additional classrooms could be built as a unit of a complete new school plant which eventually would replace the old buildings. These considerations suggest that the most important factor in the abandonment of the Madison Elementary buildings is the inadequate and unsuitable site.

Points developed in the preceding paragraphs do not fully make clear the real causes of abandonment of these buildings. Some of the things described have not changed essentially since the buildings were built; for example, the site is just as big as it was in 1910, and except for some termite damage and wear and tear which could be corrected relatively inexpensively, the buildings have not changed essentially since they were built. Something that does not change can hardly be a cause. What are the changes which are causing the abandonment of these buildings? They appear to be as follows:

a. Changes in the school program to include activities requiring outdoor space and additional facilities, such as a lunchroom. The school site is much too small in the light of these changes, and it cannot be expanded.

b. Changes in standards for health, comfort, and safety of pupils in school buildings. Hand-fired stoves, lighting from inadequate and poorly arranged window area, and firetrap stairways and fire escapes are no longer considered acceptable.

c. Changes in the environment of the site, including the paving of the highway and the introduction of heavy motor traffic, as well as the recent conversion of the adjoining former normal school building to business and industrial use. These changes resulted in a situation which was disturbing to school work and dangerous to the children.

d. Changes in the structure through the wear and tear of forty years of use, and especially through termite damage. This, however, is not very important compared to the other causes.

It seems safe to say that the combined effect of these changes is the cause of the abandonment of the Madison Elementary School buildings.

Rural School Abandonment in West Florida

It is apparent in many cases that the abandonment of a single school building cannot be satisfactorily studied as an isolated case, but must be considered in relationship to other cases and to the total situation which exists in the area in which it is located. The following paragraphs describe cases of abandonment, or prospective abandonment, of four rural school buildings in two counties in West Florida--Okaloosa and Santa Rosa. These counties adjoin, and their combined area may be considered as a single unit for the purpose of considering the background of school abandonment in these cases.

Santa Rosa and Okaloosa Counties are in the western part of Florida's panhandle, lying between the Alabama line and the Gulf of Mexico, and extending east and west a total distance of about sixty miles. With the exception of several large lumbering operations, they have until the last fifteen years been almost exclusively rural farm counties. They have both felt the impact of the huge Eglin Air Force base which covers the south end of both counties, and of state and national reforestation projects. Santa Rosa County is close enough to Pensacola to have been affected by the extensive naval air station operations there, and by the large industrial developments, particularly paper mills, of the Pensacola area.

Juniper School, Santa Rosa County.--This school was built in 1923 to serve a rural school district in the eastern part of Santa Rosa County. The area served is about 15 miles from Milton, the county seat, and at the time the building was erected was isolated by poor roads and bridges, which were subject to flooding after hard rains. Even now it is a half dozen miles from the school building to the nearest paved road.

The building was of high quality frame construction, fabricated from virgin pine lumber, and built on a continuous brick foundation. The four rooms were large in size, ceiled with pine ceiling, and had window area adequate for reasonably good natural lighting. Wood fueled stoves provided heat, water was furnished by a hand operated pump in the yard, and toilet facilities consisted of pit privies. At the time it was closed this building was in need of painting and minor repairs. However, it was generally in such sound condition that the school authorities seriously considered trying to move it to another school where building space was needed.

In 1937-38 the Juniper School had an average daily membership of 37 pupils in grades 1-6. Ten years later this had decreased to 13 pupils in grades 1-5. In 1948 the survey staff for Santa Rosa County recommended that the school be abandoned immediately and the pupils transported to the Munson School, along with the high school pupils from the area. The survey staff's reason for the recommendation, obviously, was that the membership was too small for economical and satisfactory operation of the school, and that transportation to a larger center was practicable.

In 1923 a school was needed in this isolated area. While figures on enrollment at that time are not available, it is known that they were considerably larger than in 1937, perhaps over a hundred. A rural school of a hundred pupils would have been considered satisfactory twenty-five years ago for the kind of program offered then, and even now would be acceptable for an isolated area. What was the cause of decline in school enrollment to the point that it became necessary to close the school and abandon the building?

Until recent years, the Bagdad Land and Lumber Company carried on lumbering operations in the Juniper area, employing a considerable number of people who made their homes there. In addition, other families lived on numerous small farms. A few years ago the timber was cut out and the lumber company ceased operations. Naturally, its employees moved away to seek a livelihood elsewhere. The children from the families living on the small farms moved away as they grew up, leaving only the older people with no school age children in an increasing number of cases. The land was so ill adapted to profitable modern farming that younger farmers all moved away. Much of the area was taken over by the federal government for a reforestation project. Thus the area was depopulated to the extent that it was impossible to maintain a school there and it was closed following the 1948-49 school year, when it had 14 pupils in grades 1-5.[5]

Factors in the abandonment of this building may be summarized as follows:

1. Number of pupils was too small to offer an acceptable school program on an economical basis.

2. The decrease in school membership resulted from depopulation caused by exhaustion of the timber resources and by the decline of the small "subsistence" farm economy.

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[5] Letter from C. F. Morris, County Superintendent of Public Instruction, Santa Rosa County, April 4, 1952.

3. Modern school buses and some improvement of roads made it possible satisfactorily to transport pupils from this area to another school center.

Wallace School, Santa Rosa County.—The brick building which housed the Wallace School was built in 1924 with the proceeds of a special tax school district bond issue. It is located on a paved road about five miles north of Pace, once a sawmill town and now a rather flourishing village, whose people depend principally on the extensive defense activities and industrial enterprises of the Pensacola area for their livelihood.

The school survey staff in 1948 found the Wallace School building in generally sound condition, needing only minor repairs and redecoration of the classrooms. At that time there were two classrooms in use, one classroom used as a lunchroom and one classroom completely vacant. In addition to the four classrooms, the building contained an auditorium with a capacity of about one hundred. Wood-fueled stoves provided heat, water was supplied by an electrically operated pump, and there were concrete pit privies.

In 1937-38 the Wallace School had nine grades with a membership of 62 pupils. By 1946-47 grades 7-9 had been discontinued and the membership was 42 in grades 1-6. In three years the membership declined to 36. The survey staff in 1948 recommended that the school be closed and the pupils be transported to the Pace School as soon as additional rooms could be built there. This was done, and the Wallace School was closed after the 1949-50 term.

Several different factors were involved in the abandonment of the Wallace School building. First, it is to be noted that grades 7-9 were discontinued before 1946 and before the record shows any decline in school population subsequent to 1938. Discontinuance of these grades, it is safe to say, resulted from the fact that the people concerned—parents, school authorities, and pupils—were not satisfied with the kind of school program it was possible to offer at the Wallace School for these grades, and preferred that these pupils be transported to Milton to take advantage of the junior high school program offered there. Second, after 1947 there was a decline in school membership, small in number but considerable in percentage, to the point where it was uneconomical to employ two teachers, but where there were too many pupils for one teacher. Third, classroom space became available at Pace where the survey staff suggested that a much more satisfactory program could be offered in the larger Pace School.

Though records are not available to show it, it appears probable that in 1924, when the building was built, there was a sufficient number of pupils in the Wallace School district substantially to fill the four-room building. People were satisfied with the kind of school program which could be offered by four teachers teaching eight or nine grades. Before 1938 there was some decline in membership coincident with the reduction of lumbering operations in the area. Then people became dissatisfied with the kind of program offered for grades 7-9, and transportation to Milton becoming practicable with improved roads and modern school buses, these grades were discontinued. Membership in grades 1-6 declined in the last few years, it is reported, because big paper companies bought up small subsistence farms to add to their pulpwood growing land, and because remaining small farms were occupied mostly by older people whose children were past school age. Younger people from these families usually moved away. In some cases mechanization of farming caused tenant farmers to move out of the area.[6]

Factors involved in the abandonment of the Wallace School may be summed up in these terms:

1. Partial abandonment resulted from discontinuance of junior high school grades, 7-9, which was probably the result of change in the idea of what was a satisfactory school program for pupils in these grades.

2. A membership decline apparently was caused by economic changes in the area.

3. The membership in grades 1-6 finally became too small for economical and satisfactory operation, in the eyes of the community and the school authorities. It may be assumed that this was partly because of actual decline in number of pupils and partly because of a change in the idea of what a satisfactory elementary school program was like.

4. Classroom space at a larger, more satisfactory center was made available, and comfortable transportation there was provided for the pupils.

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[6] *Ibid.*

Dorcas School, Okaloosa County.--The Dorcas School is located in a rural area in the east central part of Okaloosa County, about twelve miles northeast of Crestview, the county seat. In the past the area has been somewhat isolated owing to lack of paved roads and good bridges over the rivers and branches. Very recently a good road leading to the vicinity of the Dorcas School has been opened.

The Dorcas School is housed in a one-story, frame structure erected in 1937 as a project under the Works Progress Administration, replacing an earlier building. It contains four classrooms, an auditorium, a principal's office and bookroom, and indoor flush toilets. At the time of the survey of 1948 two classrooms were used for instruction, one was used for a lunchroom, and one was completely vacant. The structure was in good condition and with some painting and other minor improvements would have been considered an excellent building for a small school.

In 1937-38, the year it was first used, this building housed a membership of 71 in grades 1-8. In 1945-46 the membership in grades 1-8 was reported to be 41, a decline of 30 pupils, or 42 per cent, in eight years. The seventh and eighth grades were discontinued, and in 1948-49 the school had 24 pupils in grades 1-6. The 1950-51 membership was 21.

In 1948 the survey staff recommended that the Dorcas School be continued in operation temporarily, stating that ". . . . road conditions and lack of bridges make it impossible to eliminate this school at this time despite its small enrollment."[7] The staff of a second survey in 1950, however, recognizing imminent road improvements and further decline in membership, recommended that it be closed just as soon as classroom space could be provided in Crestview, stating that ". . . . enrollment has fallen so much that the school cannot be operated satisfactorily much longer."[8] Crestview schools were gravely overcrowded and the Dorcas School was reported in operation in 1951-52.

Factors involved in the partial abandonment and the prospective complete abandonment of the Dorcas School appear to be these:

1. To begin with, the school was built larger than was justified by the number of pupils in prospect. Four classrooms with a nominal capacity of 120 pupils were occupied by only 71 pupils when the building was put in use. Growth which evidently was anticipated in the planning never materialized. Instead there was rapid decline in enrollment.

2. When this school was built in 1937, Dawson's findings concerning the minimum desirable size of school were already generally accepted in the school planning field.[9] Thus the school, from the viewpoint of size necessary for a modern school program, was obsolete when it was built. The people responsible for its planning and building either did not realize this, or, if they did, considered it necessary to build the Dorcas School building because of isolation, or because local district organization dictated it, or both.

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[7] Proposed School Plant Program for Okaloosa County, 1948.

[8] Proposed School Plant Program for Okaloosa County, 1950.

[9]

3. Change in road conditions is a factor in the abandonment of this building. This is indicated by the fact that the 1948 survey suggested the school be kept in operation for a while longer because road conditions made it impossible to consolidate it, while another survey staff in 1950 definitely recommended consolidation after roads had been improved.

4. Decline in enrollment of the Dorcas School appears to have resulted from the same economic and consequent population changes as in the case of the Juniper and Wallace Schools in adjoining Santa Rosa County. Lumbering practically ceased with the cutting of the virgin timber; small subsistence farms supporting fairly large families declined in number, and such as remained were occupied by older people with no school age children, the younger people moving away; former small farms went back to forest or were taken over by large farm operators, who replaced tenants with machines.

Silver Springs School, Okaloosa County.—This four-room, frame school building near a paved highway leading to Crestview about four miles away, is reported to have been built in 1910. It was established to serve the rural farming area northeast of the little railroad station village of Crestview, which became the county seat when Okaloosa County was created and has since grown into a flourishing small city.

Though constructed of good pine lumber, the building was rather poorly planned and built. No hallways were provided and the four rooms opened directly into each other. The ceilings were built only nine feet high and the window area was small for the size of the rooms. Windows on two sides of rooms gave poorly distributed light. Wood-fueled stoves provided heat, and in recent years running water and flush toilets were installed.

The building obviously was poorly maintained over the years. Foundation piers settled and the floors became uneven, as well as rough and splintered. The survey staff said in 1948, "This building is practically worn out and cannot be made to last more than a few more years without practically rebuilding."[10]

The membership of the Silver Springs School has been growing a little bit during the period covered by available records. In 1938 its membership was 70 in grades 1-8. This number had increased to 80 in 1941-42, and to 99 in 1948-49. The enrollment in November, 1950 was 95. This growth is in marked contrast to the decline in enrollment in most rural schools in Okaloosa and Santa Rosa Counties, and is attributed to the fact that the area is close enough to Crestview to share in the substantial growth of that town.

Survey staffs in 1948 and in 1950 recommended that the Silver Springs School be discontinued and the pupils transported to Crestview four miles away just as soon as classrooms could be provided in the overcrowded Crestview schools. Since the county has not yet been able to relieve overcrowding in the Crestview schools, the Silver Springs School is still continued in operation.

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[10] Proposed School Plant Program for Okaloosa County, 1948.

These factors appear as contributing to the abandonment of the Silver Springs School building:

1. The membership of the school, in spite of growth, is too small for the type of school program now desired to be offered at reasonable cost. An eight-grade, four-teacher school has been considered satisfactory in Okaloosa County for a half century or more, but now such a school is not regarded as adequate. The concept of what is considered a satisfactory school has changed.

2. The original poor construction of the building and deterioration from poor maintenance and neglect would result in the abandonment of the building before very many years in any case.

3. The abandonment of this building is definitely affected by the financial ability of the county to replace it. If the county had the resources to build necessary classrooms in Crestview now, this building would certainly be abandoned immediately.

The background of economic and population changes in Okaloosa and Santa Rosa Counties against which the abandonment of rural schools has taken and is taking place was studied and described by Diettrich. While he wrote specifically of Okaloosa County, what he said applies in most particulars equally well to adjoining Santa Rosa County.

In spite of the decline of such rural areas as the Dorcas community, Okaloosa County gained considerably in population between 1940 and 1945. Diettrich stated:

> Of the 23 precincts of 1940, a precinct-by-precinct calculation revealed that 11 showed a total gain of 4,547 souls while 12 purely rural precincts suffered a loss of 1,292

> people. . . . This means that the county is becoming progressively urbanized. The five towns contain over half the county's population.[11]

He pointed out that preliminary 1950 census figures revealed a total gain since 1940 of 13,576 people to make a total population figure of 26,476 people, an increase of 106 per cent, almost all of which was in the southern coastal area and in or near the towns.

Speaking of changes in the economy of Okaloosa County, Diettrich said:

> Before the war, agriculture of the self-sufficient subsistence type was the dominant occupation. In 1940 there were 898 farms of which 41 per cent were operated by tenants. . . . The total value of farm products per farm amounted to $358 as contrasted to the State average of $1,517. What was even more significant was the fact that the value of farm products consumed on the farms amounted to 53.4 per cent of the total value of farm products raised. Practically all of this agricultural development took place in the northern half of the county.
>
> These agricultural conditions have changed considerably. The number of farms decreased by 234 to a low of 664 farms. At the same time the size of the farms increased from an average of 84 to 100 acres. This may indicate either the abandonment of the less efficient small farms, of the consolidation of smaller units into larger ones, or both. . . . In the meantime the value of farm products raised per farm increased to $1,075. The value of farm machinery almost doubled from $180 to $330 which indicates the improvement of the farmers' financial status. As far as farm products are concerned cotton lost its place rapidly; corn and peanuts increased their proportions. Almost 2 per cent of the crop area became devoted to vegetables. The number of chickens per farm and value of dairy products sold doubled. The value of live stock sold almost tripled while the value of poultry, fruits, and nuts quadrupled. The value of field crops sold increased almost six-fold. On the other hand, only 50.4 per cent of the produce was consumed on the farm. Thus a slow process of commercializing agriculture had its beginnings,

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[11] Sigismond DeR. Diettrich, "The Changing Economy of Okaloosa County, Florida," Economic Leaflets, IX, No. 9 (August, 1950).

> leading away from the dominance of self-sufficient, subsistence agriculture.[12]

Diettrich identified some of the reasons for these economic and population changes, such as opportunities for employment in the towns and at the huge Eglin Field Air Force base, and the development of the coastal section of the county as a resort area, as well as the establishment of national forests. He said, "The abandonment of farms and the loss of population in rural areas were as much the result of the pressure of these two developments as of the attraction of employment in the towns. It is true, however, that much of the land withdrawn was not well suited to agriculture."[13]

Rural School Abandonment in Peninsular Florida

This section discusses several cases of abandonment of school buildings in a group of South Florida counties in which a considerable number of rural schools were closed between 1938 and 1952. These counties are Hardee, DeSoto, Highlands, and Hendry. They are inland counties lying to the west and northwest of Lake Okeechobee in the southern part of peninsular Florida. The first three named are contiguous and form a single geographical area; Hendry County is similar to the others, though separated from them by Glades County.

Limestone School, Hardee County.--This school was built in 1917 to serve an agricultural area in the extreme southwest corner of what is now Hardee County. At the time the school was built the area was isolated from Wauchula, the nearest town and now the county seat, by poor roads and by a distance of about fifteen miles.

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[12] Ibid.

[13] Ibid.

The two-story, sand-brick building contained space equivalent to about seven classrooms. Some of the space on the second floor could be converted into an auditorium by shoving back movable doors. At the time of the school plant survey in 1948 three classrooms were used for instruction, a lunchroom was operated in two of the rooms, and two classrooms were unused. Rooms were satisfactorily heated by oil-fueled jacketed stoves, and indoor flush toilets were provided. The two-acre site was small but could readily be expanded to any desired size. The survey report indicated that this plant, except for need for minor repairs and renovation, was reasonably satisfactory.

Figures on the enrollment of the Limestone School in its early years are not available. In 1937-38 it had a membership of 75 in grades 1-8. Membership in these grades declined to 65 in 1945-46, but thereafter remained static. In 1948-49, the last year it was operated, the school had a membership of 65.

The survey staff in 1948 recommended that the seventh and eighth grades be consolidated with the Wauchula Junior-Senior High School. The fact that the school was much too small to offer a satisfactory program economically was conceded, but in recognition of the considerable distance to any other school center Limestone was classified as a probably temporary center for grades 1-6. That is, it was recommended that the school be continued in operation with the probability that it would be closed in five to ten years. However, when the county school authorities faced the problem of reorganization of school centers in the county in 1949, they decided to close the Limestone School then.

Lemon Grove School, Hardee County.--The Lemon Grove School in rural Hardee County was built in 1927, of brick veneer over concrete block construction. It contained eight classrooms and an auditorium seating 300 persons. Oil-fueled stoves heated the classrooms and indoor flush toilets were provided. The 1948 survey report described the building as attractive and indicated that with some minor repairs and renovation it would be a satisfactory school plant. At that time three of the classrooms were used for instruction and two other rooms had been converted into a lunchroom. The five-acre site was quite large enough for the enrollment and could readily be expanded if necessary.

In 1937-38 the Lemon Grove School had a membership of 101 in grades 1-8. Membership fell to 54 in 1945-46, but decreased little thereafter. It was 49 in 1948-49, the last year the school was operated.

The survey report recommended immediate consolidation of the seventh and eighth grades with the junior-senior high school at Wauchula, but recommended that the grades 1-6 might be continued for a few more years, suggesting that if "the school population should further decrease, the pupils in grades 1-6 should be transported to Zolfo Springs." The reason for this recommendation for a school with such a small enrollment evidently was the considerable distance to another center and the fact that ample satisfactory space existed at Lemon Grove. However, the school authorities closed the school after the 1948-49 school year. At that time there was still outstanding and unpaid, $34,000 in bonds which had been voted to pay for the building which was then abandoned.

In 1949 the Hardee County school authorities carried out a complete reorganization of the schools of the county. Besides the two cases described, they closed the Popash School with five classrooms, built in 1917; the Ft. Green School with four classrooms, also built in 1917; and the four-room Oak Grove School built in 1918. All of these schools had memberships of less than 80, except for Oak Grove which had 104, but had decreased from 122 since 1945-46. However, this represented an increase over the 81 reported in 1937-38. The Ft. Green School after a decline had actually increased in recent years and the last year it operated had a membership of 78, the same as its membership in 1937-38. As might be expected, the closing of all of these schools at one time caused considerable controversy, which went as far as lawsuits and threats of physical violence against school officials.

What were the factors involved in the closing of these schools? The survey recommendations for closing the schools, either immediately or within a few years, were based on the fact that the membership was too small for providing a satisfactory program economically, and, furthermore, in all but one of the cases school membership was declining. On the other hand, membership was not very much less in some of these schools than it had been for years.

Two elements obviously are involved in the schools being considered too small. In the first place there had been a considerable real decline in school population in the areas served by these schools since the time they were built. Most of them were built in 1917 or 1918, when the area which later became Hardee County was being developed by small farmers who found winter vegetable growing profitable. In addition to vegetable growing, many of these small farmers had small herds of cattle which grazed on the open range, and also grew some citrus trees. In the late nineteen-twenties winter vegetable growing in Hardee County began to face the competition of other vegetable growing areas, particularly the Everglades. Large cattle ranches began to be developed and much of the free range formerly available to small cattle owners was fenced. Depression in citrus prices led to the abandonment of small groves. Sawmills which formerly operated over most of the county moved away when the virgin timber was all cut. Younger members of rural families were unwilling to continue the subsistence type of farming with which their parents had been satisfied, and moved away. The economic changes, particularly the expansion of cattle ranches by buying up former small farms, continued in the nineteen-forties.[14] These changes were such as to cause people to move away from the rural areas and settle in the towns or leave the county altogether.

The second element in the factor of the schools being considered too small was the change in the concept of what is a satisfactory school program, as has been pointed out in the cases of schools in west Florida. The program it was possible to offer in the Ft. Green School, for example, was considered satisfactory in 1938 when it had 78 pupils, but was not considered satisfactory in 1949 when it also had 78 pupils.

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[14] Letter from H. B. Dominick, County Superintendent of Public Instruction, Hardee County, April 1, 1952.

The closing of these schools and the abandonment of the buildings was precipitated by the financial straits in which the Hardee County school board found itself in 1949. In spite of the greatly increased state assistance under the Minimum Foundation Program, the school board exceeded its budget and ran deficits, partly because of low tax assessments in the county, which made school tax millages unproductive, and partly because it was attempting to maintain expensive programs in the small rural school. It was calculated that if the small schools, where the pupil-teacher ratio was low, were combined with the larger schools, where a higher pupil-teacher ratio prevailed, the county could save tens of thousands of dollars a year. With the completion of the new Hardee County High School in Wauchula, ample space became available to accommodate all rural pupils in the larger centers. Most of the pupils in the rural schools were transported already so there was little extra expense for transportation. Accordingly, in spite of severe adverse public reaction in some of the communities where the schools were discontinued, the consolidations were carried out. The results are reported to be satisfactory, both financially and educationally.

In summary, the factors contributing to the abandonment of these rural school buildings in Hardee County are:

1. Decline in population resulting from changes in the rural economy.

2. The change in the concept of what is an acceptable school program in rural schools. The kind of program desired could not be offered in these small schools with the resources available, while it could be offered in the larger centers.

3. The financial crisis which the county faced. This made it necessary to take drastic action to eliminate the expensive and unsatisfactory small rural school operations. This financial crisis is hardly to be considered a causative factor, however, since it seems merely to have precipitated action which would probably have been taken sooner or later anyway.

Venus School, Highlands County.—This school was located in the extreme southern end of Highlands County, about 20 miles away from the nearest town of any size, Lake Placid. The two-story brick building was erected in 1914; it contained six classrooms and an auditorium.

At the time the school was built the Venus area was flourishing from the effects of sawmills made possible by the extension of the railroad, and from the settlement of many small farmers on the land. It is reported that many of these farmers homesteaded some of the last homestead land available in the United States.

No figures are available on the early enrollments in the Venus Schools, though it seems probable that there may have been as many as 150 pupils at one time. In 1937-38 the membership in grades 1-8 was 65, which declined to 33 in 1942. The seventh and eighth grades were discontinued in that year, but the population decline appears to have been checked for a while. The school membership remained at 30 in grades

1-6 until 1945-46, when it declined to 21. The next year four grades were operated with 19 pupils. In 1947 the school was discontinued and the pupils transported to Lake Placid.

Of the closing of this school the county superintendent wrote:

> The Venus School declined because the cattle industry bought up acreage, causing families who have been in the area doing farm work, especially raising chickens, and others working with saw mills, to move away. The school closed when the school building was condemned.[15]

Here again are seen economic changes in a rural area leading to depopulation and school building abandonment. In this case abandonment was precipitated by deterioration of the building. A small elementary school of twenty pupils or so could be justified here owing to the distance of about 20 miles to the nearest school, but the choice was made to transport the pupils nearly twenty miles to Lake Placid. Owing to excellent roads this is probably reasonably satisfactory, and is economical because a bus must be run anyway to transport high school pupils.

Ft. Bassenger School, Highlands County.—This small rural school was built in 1918 of good frame construction with plastered interior walls and ceilings. Wood-fueled stoves provided heat and in recent years running water and indoor flush toilets were installed.

Until recently the families served by the Ft. Bassenger School lived in a highly isolated situation, nearly thirty miles to the nearest town, largely over unimproved trails across the South Florida prairies.

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[15] Letter from Fred Wild, County Superintendent of Public Instruction, Highlands County, April 2, 1952.

They lived by farming small patches of ground, by keeping cattle which ran on the open range, by some hunting and trapping, and by fishing in the Kissimmee River nearby. Some worked in small sawmills or cut posts for fencing.

Membership in the Ft. Bassenger School, though quite small, was stable for many years. At the time of the school survey in 1948 the membership was 21, which was the same as in 1937-38. The survey staff, recognizing the impossibility of transporting pupils to a larger school until roads were built, recommended that the school be continued in operation as long as there were enough pupils to justify a teacher. Enrollment fell to three pupils in 1950-51, and the school was finally closed in February, 1952, when a new highway leading to the community was opened.

Membership of the school declined because the big cattle ranches absorbed the land, causing the small farmers, fishermen, frog hunters and trappers to move away. Building of the highway precipitated the abandonment of the building by making possible transportation of the few remaining pupils to another school.[16]

Felda School, Hendry County.—This school was built in 1927 with the proceeds of a special tax school district bond issue. At the time of the school survey in 1948, $34,000 worth of these bonds were still outstanding, and they will not finally be paid off until 1962.

The building included six classrooms and an auditorium of good brick over hollow tile construction. The survey staff in 1948 indicated that it was of good design and made a very good school plant except for damage caused by a recent hurricane.

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[16] Ibid.

At the time of construction the Felda School served a farming area and a sawmill town fifteen miles from LaBelle, the county seat. The distance and the lack of paved roads made a school necessary at Felda at the time, even if the number of pupils was small. Early enrollment in the school is not available, but it appears probable that more rooms than were necessary were built in anticipation of growth.

The steps in the abandonment of the Felda School building are well described by the county superintendent:

> During the school year 1938-39 a large majority of Felda's adult population were employed by a large lumber company which operated in that area. In the latter part of 1939 the timber tracts were exhausted, and the mill, with most of its employees moved to Deep Lake, 35 miles south of Felda. That caused the biggest single drop in enrollment.
>
> In 1944-45 there were so few Felda students in the high school grades that it was cheaper to transport them to LaBelle and retain only elementary classes at Felda.
>
> The 1947 hurricane damaged the Felda School so badly that to repair it would have required practically an overall remodeling. It was decided that it would be cheaper to use one more bus and transport the remaining students to the LaBelle School.[17]

The decline of the Felda School can be traced in the membership reports. In 1938-39 the school had a membership of 101 in grades 1-9. The effect of the moving of the sawmill appears in the membership of 54 reported in 1942. Farm families moved away as the agricultural economy shifted to ranching. There were 28 pupils in grades 1-8 in 1944-45. In 1947-48, the last year the Felda School was operated, there were 17 pupils in grades 1-4.

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[17] Letter from Mrs. Agnes Y. Thomas, County Superintendent of Public Instruction, Hendry County, April 2, 1952.

The case of the Felda School illustrates abandonment of a good school building, used only a few years, caused by moving away of the principal supporting industry, accompanied by change in the agricultural economy from a small farm system to large farm units. Consolidation was made possible by good roads and was precipitated by hurricane damage to the building.

Brownville, School, DeSoto County.--The Brownville School was housed in a two-story, yellow brick building containing four classrooms constructed in 1925. The rooms were heated by wood-fueled stoves, and indoor flush toilets were provided. The survey staff in 1948 reported that the building was in a fair state of repair.

The Brownville School served a rural area about seven miles north of the county seat, Arcadia. In 1937-38 it had a membership of 36 in grades 1-8. In 1940-41 the seventh and eighth grades were discontinued, leaving 24 pupils in grades 1-6. The school was discontinued following the 1947-48 school year, when it had 21 pupils in grades 1-6.

The Brownville School is one of several abandoned buildings in DeSoto County. Among them are: Pine Level, a two-room masonry building constructed in 1920 and closed in 1944; Owens, a two-room standard frame building dating from 1916 and closed in 1948; and Oak Hill, a four-room masonry building constructed in 1918 and abandoned in 1948.

The county superintendent gives this analysis of the factors contributing to school building abandonment in DeSoto County:

Originally, DeSoto County was heavily forested. During the twenties and early thirties the timber was worked for the turpentine industry. Later, the timber was cut and made up into lumber at local saw-mills, or the logs were transported to Nocatee or to Manatee, in Manatee County, and made into lumber or crate material.

Before and during this period there were several thriving communities in DeSoto County, among them Pine Level, Owens, Oak Hill, and Brownville. Around these communities were local farmers with small blocks of land ranging from forty to several hundred acres. When the forest industries moved in with its workers the population increased. During this time of activity there was agitation for the building of schools, which was accomplished by the voting of bonds.

At that time there were no adequate roads by which children could be transported to school. The school had to be constructed within walking distance of the majority of pupils to be served.

It is my understanding that most of the buildings were constructed larger than was necessary in order to provide for further growth in population. The fact was that these communities were at their height in population at the time the schools were built. Apparently, few people realized that there would be no way of maintaining these communities after the forest resources had been exhausted. . . . After the timber was all gone, the communities began to dwindle, and what had once been a beehive of activity was more or less a ghost town.

Most of the original settlers remained in these communities for a time. But eventually roads were built and the children grew up and left to find employment in Arcadia or some other town. No one remained on the farms except the old folks, who, in most cases sold their land to big cattle owners, and moved in town where there are more conveniences.

The development of the cattle industry in the last ten years has contributed materially to the decline in these communities. The big cattlemen can pay a very attractive price for the old home, after which it is planted to grass for cattle.

The cattle owners will not give up their land at any price. Even if anyone wanted to re-buy the old settler's farms, they are not for sale at any price, due to the profitable cattle business.

Of course where the communities dwindled in population and good roads were built, these schools were abandoned and the few children remaining were transported to larger schools.

The irony of it all is that we in DeSoto County have about one hundred twenty-five thousand dollars worth of school buildings which are not used for any purpose other than voting about every two years.[18]

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[18] Letter from L. H. Hancock, County Superintendent of Public Instruction, DeSoto County, April 3, 1952.

Abandonment of Negro School Buildings

The fundamental assumptions on which the present investigation are based recognize no difference between white and Negro schools. It is logical to assume that factors that contribute to abandonment of schools for one race will operate likewise for the schools of the other race. However, since Florida operates a bi-racial system of public schools, it seems appropriate to give some special attention to cases of Negro school abandonment, and examine the factors involved.

Lightsey School, Jefferson County.—This school was located on an unpaved country road about ten miles east of Monticello, the county seat and only town in the county. It was built in 1938 as a project under the Works Progress Administration, replacing a Negro church building formerly used to house the pupils. The structure was neatly built of good quality frame construction, and the two classrooms were well arranged and had adequate window area. Except for the wood-fueled iron stoves, the open well which was the source of water supply, and the pit privies, the building could be considered quite adequate and satisfactory for a small school, and represented a vast improvement over the former makeshift school facilities.

The school served the Negro children in grades 1-8 living on the farms and plantations within three miles. No transportation was provided for any of the children. The kind of teaching, of course, was the same as has been offered in one- and two-teacher schools in the United States for a hundred years, with each teacher trying to teach all the subjects in several different grades. It was the same kind of school program that the rural white children in the county had had years previously, before improved transportation made school consolidation possible.

The Lightsey School building was filled almost exactly to capacity the year it was first occupied, with 61 pupils in grades 1-8. School membership soon began to decline, however, and in 1946 was 33. This decline was coincident with a large decline in Negro population in Jefferson County, which decreased by 25 per cent in the decade ending in 1945.[19] After 1946 the membership remained stable at about 30. Seventh and eighth grades were discontinued in 1948, when limited transportation service to take rural Negro pupils to the high school in Monticillo was established. In 1948 the Lightsey School still had 28 pupils in grades 1-8, an ample number for a one-teacher school. However, it was discontinued in 1949 when transportation service was still further expanded and the pupils were transported to a larger school.

The Lightsey School is one of eighteen good frame Negro school buildings containing thirty-four classrooms, constructed between 1930 and 1940 in Jefferson County, which the survey staff in 1949 recommended for discontinuance because they were too small, along with several others housed in churches and lodge buildings. Five of these good buildings have already been abandoned. The remainder will be abandoned gradually as Jefferson County provides classrooms at its permanent Negro school centers and expands its transportation service for Negro pupils. This it has already started to do. When the program recommended by the survey staff is completed, the Negro school system of Jefferson County will parallel the organization of the school system for white pupils, which developed into its present form through consolidation into three permanent centers over a period of thirty years. No history of consolidation of white schools in Jefferson County is available for comparison, but in adjoining Madison County eighteen white school centers were consolidated into seven in the fifteen years prior to the survey of 1948.[20]

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[19] Proposed School Plant Program for Jefferson County, Florida, 1949, p. 2.

Some interesting observations are to be made in the case of the Lightsey School, and all the others in the county built between 1930 and 1940, which have been or soon will be abandoned:

1. The Lightsey School and the seventeen others like it were built in conformance with an obsolete plan of school organization which was already being abandoned for white schools. In the nineteen thirties one- and two-room rural schools and the programs possible in them were generally no longer considered good enough for white children. However, they were considered entirely satisfactory for Negro pupils. At that time school authorities and white citizens of Jefferson County would have completely rejected the idea of Negro consolidated schools requiring extensive transportation service. High school opportunities for rural Negro youth were scarcely considered.

2. The attitude toward education for Negroes changed considerably in Jefferson County in the decade after these buildings were built.

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[20] Proposed School Plant Program for Madison County, 1948. p. 3.

After World War II the necessity for high school opportunities for rural Negro youth was recognized to the extent that the school board was willing to begin to provide transportation to bring them to the Negro high school at Monticello. With more generous support of education after the Minimum Foundation Program was put into effect in 1947, funds were made available for new buildings and other improvements for Negro schools. School authorities began to realize that much of the money for small Negro schools where the teacher had only a handful of pupils and no supervision was wasted.

3. Having begun transportation for Negro high school pupils it was an easy step to the transportation of elementary pupils and the consolidation of small rural schools. A new Negro school building was completed in Monticello in 1951, and fifteen small Negro schools mentioned in the survey report of 1949 were consolidated as recommended.

4. Though some population decline was involved, the abandonment of these school buildings was principally the result of the change in public attitude toward education for Negroes. Essentially, the same factor appears here as in the case of white rural schools described in the preceding pages; that is, the concept of what was an adequate and acceptable school program changed.

The changes in public attitudes with respect to Negro education were discussed by D. E. Williams, the state director of Negro education, in a recent review of the progress in Negro education in Florida since 1927. After pointing out that the poor provision for Negro schools in the past reflected the "negative" public attitude toward public education for Negroes, and citing great gains made in recent years, Williams said:

> The most gratifying and encouraging growth has been in attitudes which guide action. Officials are developing the attitude that a school is worthy of consideration and adequate support regardless of its classification, location, or racial identity. Citizens are changing from personalized attitudes regarding education to civic concepts of education. The function of public education is being understood more clearly and increased support accompanies understanding. . . .[21]

Examples of Deterioration of School Buildings

Many school buildings studied in this investigation showed considerable deterioration either from poor maintenance, or from original deficiencies of design and construction, or both. However, in very few cases did deterioration, not accompanied by other factors, appear to be the cause of recommended abandonment. Examples of buildings showing serious deterioration follow:

Douglas Negro School, Live Oak, Suwannee County.—The one-story Douglas School building was constructed in 1927 on a one-acre site in the Negro section of Live Oak, completely surrounded by Negro residences, and, incidentally, only a block from the large Live Oak school for white children. It was built of brick and contained six reasonably satisfactory classrooms which by the time of the survey in 1948 had become dingy and dilapidated through neglect. The school had a membership of 366 in grades 1-12 in 1938, had grown to 494 in 1951. This number was accommodated by crowding the children into the six rooms and by providing cheap temporary buildings.

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[21] D. E. Williams, "Improvement of Education for Negroes in Florida, 1927-1952." Supervisory News Notes, Vol. VIII, No. 5, (March 28, 1952), p. 7.

The deterioration of this building is indicated in the report of a structural inspection made by the state school architect:

> a. The northwest and southwest corners of the building wall appear to be settling and cracks at the top of this wall have opened some two or three inches. The walls at these corners are out of plumb in two directions at least two or three inches. The eight inch brick wall bears on a stepped brick footing that is partially exposed at the corners where there is indication of settlement.
>
> b. These exterior brick walls are eight inches thick and approximately 14 to 15 feet high, with no perimeter beam at the top of this wall. The window heads terminate level with the top of the wall and all roof framing begins at this line.
>
> c. The hip roof framing of this building does not have any ties between the rafters and the ceiling joists. The ceiling joists are spliced at a point three or four feet short of the exterior masonry wall.
>
> d. The floor construction appears to be sound and is independent of the exterior bearing wall.
>
> . . . .
>
> It is recommended that this building be abandoned as soon as possible and in no case should it be used for the next school year.[22]

The deterioration of this building appears to have been the result of poor structural design and cheap construction.

The survey staff in 1948 recommended abandonment of the plant. In addition to pointing out the deterioration of the main building, the report states: "The one acre site is inadequate for any school purpose. It is undeveloped and neglected. A new site of at least 15 acres should be acquired . . . ."[23] This indicates that the plant would have been recommended for abandonment regardless of the condition of the building, because of the inadequacy of the site.

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[22] Supplement to the Report of the School Plant Survey of Suwannee County, December, 1949.

[23] Proposed School Plant Program for Suwannee County, Florida, 1948.

The school authorities have purchased a new adequate site, as recommended, and have projected plans for a complete new Negro school plant. The old site doubtless will be abandoned in a very few more years.

White Brick Building, Lake City School, Columbia County.—This is one of five buildings which stands on the four-acre site occupied by the Central Elementary School and the Columbia High School in Lake City. More than one thousand pupils attended these two schools in 1950-51.

This building was erected in 1906 of white "sand" brick with wood frame, plastered interior construction. Six rooms were provided on each of the two floors. They were fairly well arranged, generous in size, and had reasonably adequate window area considering the date of construction.

A considerable number of years ago cracks began to appear in the southwest corner of the structure. These cracks gradually became worse and extended up to the roof line. Brick work gradually crumbled at this corner, leaving a hole extending upward about six or seven feet.

School authorities and parents were naturally alarmed for the safety of the children in the building, and had it vacated for classroom purposes. Records did not show the date of this action but information obtained orally indicated that it was about 1935, when the building was approximately thirty years old. Since that time the first floor of the building has been used only for a lunchroom, for storage, and for other miscellaneous purposes. It would have been razed long ago if the county had had the money to provide a new lunchroom building.

The deterioration of this building evidently was the result of poor structural design which made insufficient provision for foundation strength. Furthermore, the type of brick used is deficient in strength and there may have been defects in workmanship. It may be surmised that an attempt was made to build the building too cheaply.

Old High School Building, Lake Butler, Union County.—This six-room, two-story brick building was constructed in 1908. With time and neglect it became very much dilapidated; the floors were cracked and worn, and plaster fell from the walls. The arrangement of the rooms was obsolete and the building was beyond rehabilitation into a satisfactory modern school facility. The survey staff said in 1948 that: "This old building is beyond repair and is unsafe to be left standing on the school site."[24]

In this case there is no evidence of structural failure. The building simply wore out through use and neglect of maintenance. It became obsolete and the large cost of rehabilitation would not have been worthwhile. It was demolished in 1951 after being replaced by new high school classrooms.

Old High School Building, Williston, Levy County.—The case of this building is very similar to that of the Lake Butler building described above. This two-story brick building was constructed about the year 1910, following a style and arrangement which is now considered obsolete. The survey staff in 1947 found it in very poor condition through wear and neglect, and not worth repairing. It was demolished in 1951 after being replaced with new facilities provided by means of a county-wide bond issue.

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[24] Proposed School Plant Program for Union County, Florida.

Buildings Improperly Located to Serve Population

Until very recent years almost all school buildings of any size in Florida were built from the proceeds of bond issues voted by local special tax school districts, many of which were quite small. These bond issues were subject to practically no supervision by the state or any other agency, and during the Florida boom of the nineteen-twenties a very heavy school bonded indebtedness was incurred.[25] School building bonds were often voted without any consideration of educational needs, number of pupils to be served, or any of the other factors significant for a school building program. Sometimes the buildings were not needed at all or were not well located to serve the population. Illustrative cases are described in the following paragraphs.

Laurel School, Sarasota County.—The Laurel School was built during the Florida boom of the nineteen-twenties, when Sarasota County was experiencing a rapid development. Under the influence of the real estate promoters and boosters, almost every community in the county was striving to do everything which might attract people. The Laurel school district voted bonds to build an attractive four-room, stucco-over-hollow-tile, one-story structure containing four classrooms and a spacious auditorium. The building was completed in 1928 after the boom had begun to collapse. Expected growth did not materialize at Laurel, which fell behind its rival community of Venice-Nokomis about four miles south.

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[25] See pp. 7-8.

The figures on enrollment when the building was put in use are not available but the number of pupils was evidently quite small. Ten years later, in 1937-38, the membership in grades 1-6 was 28. By 1942 a plan had been put into effect whereby all pupils in the Venice-Nokomis-Laurel area in grades 1-4 were transported to Laurel, while all in the fifth grade and above attended the Venice-Nokomis School. In 1942 Laurel School reported 18 pupils in grades 1-4.

During and following World War II this section of Florida experienced another boom. Membership in the Laurel School jumped to 108 in 1946-47, and the building was crowded with 142 pupils at the time of the 1948 survey. Temporary frame buildings were provided for the excess pupils, as membership climbed to 164 in 1950 and 176 in 1950-51.

However, study of spot maps by the 1948 survey staff showed that very few of these pupils lived in the Laurel community, but were clustered at Venice-Nokomis. Therefore, it was recommended that facilities be constructed at Venice-Nokomis and that the Laurel School, having very few pupils properly of its own, be discontinued. These findings were confirmed and the recommendation renewed by the staff of another survey in 1951. Sarasota County has recently voted a bond issue to meet its most pressing school building needs and it appears that the Laurel School will be discontinued when the building program is completed.

Cases like this one, or similar to it, are not peculiar to the time or the section of the state in which occurred the Florida boom. Several similar cases in which buildings were built in the nineteen-thirties were noted in other parts of the state. One case from western Florida is presented.

Point Washington School, Walton County.—The brick building housing this school was built during the nineteen-thirties as a project under the Works Progress Administration. It was an attractive building of good quality construction containing six classrooms, a large auditorium, and indoor flush toilets. The project was promoted by the trustees of the former special tax school district then existing in the area, which provided the required sponsor's contribution to secure the project. It was built over the protest of the State Department of Education, which by that time offered school plant planning services but had only advisory powers on questions of building school buildings.

The area served by the school is a sparsely populated section of Walton County, on the peninsula which lies between the Choctawhatchee River, the Choctawhatchee Bay, and the Gulf of Mexico. The people work in forest industries, cultivate small farms, or fish. With the cutting of the virgin forests the population declined considerably.

The building was constructed much larger than required for the number of children in the whole area. Another school was at Santa Rosa on the same peninsula about eight miles away. The two schools between them had 72 pupils in grades 1-10 at the time of the 1948 survey, almost all of them transported. The school board, unable to bear the expense of operating two extremely small schools and unable to decide between the two communities, was operating the school in Santa Rosa one year and in Pt. Washington the next. Finally, this unsatisfactory situation was corrected. Most of the pupils were in the Santa Rosa community so the school, reduced to eight grades with about 45 pupils, has been operated there for the last two years and the Point Washington building was completely abandoned.

These significant facts related to the abandonment of the Laurel and the Pt. Washington School buildings appear:

1. The buildings were built in utter disregard of any real facts concerning educational need or number of pupils to be served.

2. The former system of local special tax school districts, with complete autonomy with respect to power to issue bonds or otherwise provide funds to build school buildings, made possible this waste of public resources.

School Building Abandonment Because of Decline of Urban Residential Area

Two examples of imminent school building abandonment in urban areas resulting, according to the survey reports, from decline of urban residential areas will be presented. These cases were judged to be typical of several involving a considerable number of classrooms in Florida's largest cities.

Henderson School, Tampa, Hillsborough County.—This school was built about the year 1920 to serve a then relatively new white residential section some distance north of downtown Tampa. Between this area and downtown was the "Scrub," Tampa's principal Negro slum section.

As in the case of most schools built at the time, a very inadequate site—about two acres—was provided. The building was described in the survey report as a three-story brick structure of pleasing exterior appearance, with non-fire resistive interior. The nineteen classrooms were indicated to be satisfactory in size and window area, but were heated by individual gas radiators and illuminated by inadequate electric fixtures. An auditorium and a lunchroom were provided. The report infers that with a central heating plans, improvements in artificial lighting, and redecoration of the classrooms the building would be reasonably satisfactory for a congested urban area. It was given a score of 553 out of a possible 1000, meaning "building usable but in need of some improvement."

The classroom capacity of the building was 570. In November, 1946 the membership in grades 1-6 was 312; 170 seventh and eighth grade pupils were also housed in the school because of overcrowding in the junior high schools serving the area, making a total of 482. A year later the junior high school grades were withdrawn and the membership in grades 1-6 had fallen to 266, leaving the building more than half disused at the time when some other schools in Tampa were overcrowded to the extent they were "on double sessions." The survey staff recommended that this be considered a temporary school center, to be abandoned as soon as further decline made it uneconomical to maintain.

The decline of membership in this school principally was caused by the encroachment of business and industrial activities and the Negro slum section into the school's attendance area. Observation of the age and type of houses of the remaining white population indicates that it is probable, also, that the remaining white families in the area tend to be composed of older persons whose children have grown up and moved away. Encroachment has gone so far that the school building itself is surrounded on three sides by Negro residences and commercial and industrial concerns.[26]

It is impossible from available sources of information to get a full picture of the situation which existed when the school was built. Such information as is available suggests that even when the building was built it was not centrally located for its population, but was on the edge of the attendance area toward the slum section and the downtown section. Thus when the commercial and industrial areas began to spread and, in turn, to push the slum area farther out, the school was soon surrounded and a large part of the population it served moved away. It may be speculated that if the school had been located centrally in its attendance area, or preferably on the edge of the area away from the slum and the downtown section, it might have had a population to serve considerably longer.

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[26] Letter from Crawford Greene, Business Manager, Hillsborough County Public Schools, Tampa, April 3, 1952.

Suggestions have been made to convert this building into a Negro school, or into county school administrative offices. However, there seems to be a sufficient number of classrooms for Negroes in the area and the county school administration is to have a commodious suite in the new courthouse now approaching completion. Thus it seems very probable this building will be completely abandoned for school purposes in a relatively short time.

Cuesta School, Tampa, Hillsborough County.—The first section of the Cuesta School building was constructed in 1915. The building was doubled in size by an addition in 1922. A lunchroom was built in 1946. The two-story brick structure was reported by the survey staff in 1946 to be in good condition, though rather obsolete in style and arrangement of space. A central heating system was provided. The site was only slightly more than an acre in area, and the whole plant was scored at 353 points out of 1000, which was interpreted to mean "condition calls for extensive remodeling and improvement." The fifteen regular classrooms had a capacity of 450 pupils.

In 1936-37 the Cuesta School had an enrollment of 550 in grades 1-6. In 1947 membership in grades 1-6 was 290, which fell the following year to 282. The vacant classrooms in the building were used temporarily after World War II to accommodate seventh and eighth grade pupils transported from one of the overcrowded suburban schools.

At the time it was built and enlarged the Cuesta School served an area in the western part of Tampa which included many factories producing hand-made cigars. In recent years many of these have closed down, or have introduced machines requiring fewer workers, causing many persons formerly employed there to move away from the neighborhood. This change was accompanied by an encroachment into the area by commercial and business establishments as the downtown section of the city spread westward across the Hillsborough River. Another development causing decline in the Cuesta School enrollment was the expansion of a nearby Negro residential section. It has also been suggested that decrease in size of families among the newer generation of the Latin population in the area has contributed toward the decline of the Cuesta School.[27]

The survey report indicated the Cuesta building is not very satisfactory, and its abandonment in a few more years probably will not represent a very great loss.

Encroachment of Business and Industrial Areas on a School Site

This section describes the case of a large school building which has become unsatisfactory to use because of the encroachment of commercial and industrial areas on its location. This is somewhat different from abandonment resulting from depopulation caused by encroachment of business and industry into a residential area.

Gainesville High School, Alachua County.—The two-story, E-shaped, red brick building housing the Gainesville High School was built in 1925. It was well constructed and the twenty-five classrooms were appropriately designed and arranged for high school use. A lunchroom and an auditorium with combination stage and basketball court were included, and a concrete block shop building was built at a later date. In recent years portable frame classroom buildings have been added to the plant.

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[27] *Ibid.*

A site measuring 600 feet by 300 feet, or slightly more than four acres, was provided. The building faced on the city's principal east-west thoroughfare leading from the downtown business section to the University of Florida campus. In 1925 the neighborhood was almost exclusively residential in character, although railroad tracks were only a block away.

The site was midway between the business section and the university campus, about a half-mile from each, and in 1925, as at present, was centrally located with respect to the population to be served.

The character of this plant indicates that it was planned to house the conventional, traditional type of high school program prevalent in the first quarter of the century. No provision was made for vocational education or for music, and only very limited facilities were provided for physical education or other outdoor activities. The building was probably more than adequate in size for the student body in 1925, but no adequate provision was made for expansion of the facilities in case of substantial growth in membership or additions to the school program. Half of the four-acre site was occupied by the building and the front lawn. Substantial expansion of the site was impossible without prohibitive expense and the closing of arterial streets.

In the quarter century after construction of the building

Gainesville grew from a town of 8466 in 1925[28] to an urban community of upwards of 30,000 people. The business section, which was a half-mile away from the school in 1925, pushed steadily westward and within ten years was beginning to surround the building. University Avenue, on which the building faced, carries very heavy traffic, and the survey staff in 1948 noted that "Street noises are very disturbing to the school program. The adjacent business section adds to the distraction."[29] The street back of the site also became a heavily travelled thoroughfare.

In 1937-38 Gainesville High School had a membership of 853 in grades 7-12. In 1949 this had increased moderately to 899. Thereafter, the record shows rapid growth, jumping to 992 in 1949-50 and 1040 in 1950-51. The present membership in Gainesville elementary schools makes certain even larger increases in high school membership in the next few years.

School officials were faced with a dilemma by this growth in high school membership and by the expansion of the high school program and resulting demand for additional facilities. The addition of shop work to the program, the organization of a band, and the development of physical education and recreation activities created a demand for a shop, a music suite, and better gymnasium facilities, in addition to the necessary additional classrooms for the larger number of pupils. If these facilities were built on the present site the little existing playground space would be used up, while the encroaching business and industrial activities would make the environment more and more unsuitable for a school. On the other hand, they could not provide such facilities at a new adequate site without abandoning very good classroom facilities in the present building.

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[28] The Seventh Census of the State of Florida, 1945, Table 22, p. 84.

[29] Proposed School Plant Program for Alachua County, Florida, 1948.

The 1948 survey staff recommended that a new, adequate, and suitable high school site be secured, and that facilities for the senior high school grades be built on it as soon as possible, using the present plant for junior high school grades for a number of years until it was possible to replace it at another site. This suggestion was adopted as the basis for long range planning by the school authorities.

These are significant observations to be made in the case of the Gainesville High School plant:

1. In a proper effort to locate this school centrally it was placed squarely in the line of growth of the business section, which in a relatively short time grew around it and created a disturbing and very unsatisfactory environment.

2. The plant, including the site, was planned for the conventional academic type of high school program then found in most Florida high schools. No adequate provision was made for expanding the plant to accommodate possible additions to the school program, such as music, vocational education, shop work, etc., which were offered in many high schools in the nation in 1925.

3. No adequate provision was made for accommodating possible greatly increased high school membership, in spite of the fact that Gainesville

had grown from 6,860 in 1920 to 8,466 in 1925,[30] an increase of 23 per cent in five years.

The changes which are bringing about the abandonment of the Gainesville High School plant can be summed up as follows:

a. Changes in the environment of the school caused by encroachment of the business section.

b. Changes in the school program requiring additional facilities which cannot be provided on the limited site.

c. Changes in school membership through growth, resulting in numbers which cannot well be housed on the limited site.

It is interesting to speculate what the situation might have been if minimum site standards proposed before 1925 had been followed in the planning of the Gainesville High School. In 1922 the report of the Commission on the Reorganization of Secondary Education appointed by the National Education Association said:

> Five acres is the minimum for a school of 500 pupils. Nothing short of a 10-acre site will suffice for large schools. And even the school of 500 pupils requires this larger site if it is to include a general athletic field with accommodations for spectators. A 12- to 15-acre site is always desirable . . . .[31]

In 1925 a fifteen acre site should have been available just as centrally located for the pupils as the present Gainesville High School plant, though perhaps not served by paved streets at that time. Such a site would almost certainly have been outside the zone of business expansion between the downtown section and the university campus, and, even if threatened with encroachment, the size of the site would have protected the buildings from disturbance. On such a site there would have been space for physical education and athletic activities, and, as the school program was expanded, shops, a gymnasium, and a music suite could readily have been added. As membership grew classrooms could have been added up to the maximum desirable capacity for a high school. As far as can be foreseen now, the buildings could have been used satisfactorily for another fifty years instead of being abandoned in another five or ten years.

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[30] The Seventh Census of the State of Florida, 1945, Table 22, p. 84.

[31] Report of the Commission on the Reorganization of Secondary Education, United States Bureau of Education Bulletin, 1922, No. 23, quoted

Significant Points Revealed by Case Studies

These case studies are intended to clarify some of the factors contributing to the abandonment of school buildings indicated in the survey reports and reported in Chapter III. The case studies also reveal some significant points and suggest additional factors not mentioned in the reports. For example, while the survey reports frequently show that "membership too small" is a reason for recommending the abandonment of a school building, they rarely indicate why the membership has become too small. The case studies of rural school abandonment reveal that membership has become too small because of decline in rural population, and because the schools are considered unsatisfactory if only the traditional program is offered and are too expensive to operate if an

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by N. L. Engelhardt and Fred Engelhardt, Planning School Building Programs, p. 144. Emphasis supplied.

acceptable modern program is attempted. Among the examples of town, or urban, schools are two cases where there is ample growing membership, but the sites are much too small to provide for what is now considered an acceptable school program. It seems worthwhile to present further data relating to these two factors; namely, population change and changes in school programs.

1. The decline of rural population noted in the case studies is part of the downward trend in farm population occurring in the state as a whole and throughout the nation.

In 1920 the rural farm population of Florida was 279,370; in 1950 it was 232,806, a decline of 46,764, or 16.7 per cent. In the same period of time Florida's total population grew by 186.2 per cent from 968,470 to 2,771,305, and the urban population increased 410.0 per cent. The rural farm population was 28.8 per cent of the total population in 1920 and only 8.4 per cent in 1950.[32] Schools which principally served rural farm populations naturally declined in membership during this period, many to the point of abandonment.

The nationwide extent of the trend away from rural farm areas is shown in this quotation from the preliminary report of the nationwide School Facilities Survey:[33]

> The migration from farm to city and suburban areas, checked by the depression of the 1930's, again has become an important trend, intensified by the needs of defense industry and other

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[32] U. S. Bureau of the Census figures quoted by John M. Maclachlan, "Florida's Population, 1920-1950," Civic Information Series, No. 11, University of Florida, Gainesville, p. 2.

[33] See page 10.

> social and economic facts. From 1940 to 1947 the farm population decreased 3,235,000 persons, or 12 per cent of the 1940 figure.[34]

2. The changes in the school program which are likely to make it prohibitively expensive to operate a small school are well described in the same authoritative source:

> More and more the increasing complexity of civilization has heightened public demand for new educational services, many of which require additional and even unique housing and other special facilities more expensive than those for the traditional bookish programs formerly the rule. Included in such services and facilities are home-making laboratories and equipment; business-education laboratories and office machines; agriculture, trades, and industry shops and facilities; physical education and health facilities; cafeterias, essential whenever many of the children are transported by school bus and desirable as health adjuncts in virtually all schools; and laboratories and facilities for the natural and physical sciences. It is no longer considered possible to present the varied types of educational activities now demanded in rooms designed for academic work of the traditional kind. . . .
>
> In the elementary school the introduction of science means equipment and space not formerly provided. The growing emphasis on social studies at this level means space for books and equipment not used in a less modern program.
>
> The increasing emphasis on health and physical fitness programs, both as a national concern and for personal efficiency, means not only appropriate all-weather schoolhousing for such activities at elementary and secondary levels, but also a site of adequate size and furnished with at least certain basic equipment and facilities.
>
> No longer is it felt that a good teacher can practice her art in virtually any sort of schoolroom with equal success. The modern emphasis on "learning by doing" implied the necessity for larger spaces so that boys and girls have room to try things themselves rather than sit passively by to hear or read about them. Larger rooms, better lighted and heated, furnished with such equipment as may be used appropriately at elementary or secondary levels are needed nowadays. . . .

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[34] School Facilities Survey, 1951-52, First Progress Report, p. 19.

> Modern school plants must be designed to provide for numerous community uses. Activities which often must be incorporated into school housing plans include adequate space for community and educational meetings; shops in which farm machinery can be repaired by the farmer, himself; community libraries; community canning; evening classes of various kinds; youth organizations; and facilities for community physical education and recreation, both indoor and out.
>
> The demands for educational change and improvement made upon the schools are such that many school houses have rapidly become as obsolete as a one-mule plow. In many of them it is impossible to have a modern educational program at all, and they are of a design and in such condition that it is no longer feasible to remodel or rehabilitate them. . . .[40]

The case studies reported in this chapter reveal additional factors contributing to the abandonment of school buildings which do not appear, or are merely hinted at in the survey reports. These additional factors may be summed up as follows:

1. Building of roads and bridges, making possible transportation of pupils from the abandoned schools to other centers.

2. Financial crisis leading to attempts to economize by closing small schools considered too expensive to operate.

3. Storm damage to a building not considered worthwhile to repair.

4. Completion of new buildings at the logical permanent centers, making it possible to consolidate the unsatisfactory schools.

Finally, among these representative cases are revealed some fundamental mistakes in school building planning which lead eventually to school building abandonment; namely, constructing buildings with no careful consideration of educational needs or number of pupils to be served, locating buildings where there are no pupils, or neglecting to provide sites which can be developed to meet population growth or changing educational programs.

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[40] Ibid., pp. 22-25.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this investigation was to determine the principal factors which bring about the abandonment of school buildings. An intensive study was made of cases of abandoned buildings and buildings recommended for abandonment by school survey staffs in Florida from 1946 to 1952.

Data presented showed that during the period from 1936-37 to 1950-51, school enrollment in Florida increased from 389,795 to 527,174, or 35.2 per cent. At the same time the number of school centers decreased from 2145 to 1434, or 33.2 per cent. The number of school buildings actually abandoned in Florida from 1937 to 1951 was 942.

The reports of school surveys made from 1946 to 1952 included recommendations for the abandonment of 961 school buildings containing 3221 classrooms; 153 of these buildings had major auxiliary facilities, such as auditoriums and lunchrooms. By June 30, 1951, 350 of the buildings recommended for abandonment had actually been abandoned.

Since World War II numerous school buildings have been constructed in Florida. Many other buildings must be constructed to meet needs estimated at more than $190,000,000 in March, 1951. These facts suggested the need for this study.

The following factors were determined from school building survey reports to have contributed to the abandonment of the 961 buildings studied:

1. School Membership Too Small
2. Inadequate Size and Unsuitability of School Site
3. Decline of Urban Residential Areas
4. Undesirable Environment Because of Encroachment of Business and Industrial Areas on School Sites
5. Poor Quality and Deterioration of Structure
6. Obsoleteness of Plan and Design
7. Building Not Well Located to Serve Population

Detailed studies of representative cases revealed additional evidence concerning factors in school building abandonment not disclosed, or not made clear, in the study of the survey reports. Following is a summary of this additional evidence:

1. "School Membership Too Small" is the result of two kinds of changes. They are:

   a. Decline in population resulting from economic changes, but probably involving also certain cultural changes. Most cases studied were in rural areas.

   b. Change in the concept on the part of the public and of school officials of what constitutes an adequate and acceptable school program. The kind of school program now generally desired involves additional services and building facilities that cannot be provided for small school memberships except at exorbitant expense. Such expense can be justified only where there is no reasonable possibility of assembling pupils in larger groups.

2. "Inadequate Size of School Site" is usually the result of changes in the school program to include activities not considered essential when the building was planned, which require considerable ground area. This factor may also result partly from growth in school membership.

   An "inadequate site" does not have room for necessary buildings to house increased numbers of pupils, or space for the additional activities of the currently desired school program.

3. "Obsoleteness" of a building is the result of at least two changes. They are:

   a. Changes in the school program to include activities for which the building is unsuitable or inconvenient.

   b. Changes in standards for the health, safety, and comfort of the pupils.

   An "obsolete" building cannot economically be rehabilitated to meet present standards for health, safety, and comfort of pupils or to provide suitable facilities for the presently desired school program.

4. The location of school buildings without proper consideration for the distribution of the pupils, and the construction of some buildings which were not needed at all, has resulted from the former system of small local school districts.

These districts had practically complete autonomy in deciding on the construction of school buildings, and sometimes acted without adequate consideration of facts concerning needs.

5. The abandonment of a school building is often not the result of any single one of the factors defined, but of a combination of two or more of the factors.
6. The actual abandonment of a school building may be precipitated by such factors as these:
    a. Building of roads and bridges, making transportation of pupils to more adequate school centers possible.
    b. A financial crisis in the school system which makes it necessary to save money by closing small, uneconomical schools.
    c. Damage to a building caused by storm or fire so extensive that it is uneconomical to repair.
    d. The provision of adequate facilities for the pupils at another school center.

Conclusions

On the basis of the evidence found in the survey reports and in the studies of representative cases of abandoned school buildings, it may be concluded that the principal factors contributing to the abandonment of school buildings in Florida are:

1. Changes in Population. Population changes are of somewhat different character in rural and in urban areas.
    a. In rural areas population decline leading to school

building abandonment has been the result principally of changes in rural farm economy from a system of small subsistence farms to a system of large mechanized farms, or ranches. Another cause of rural population decline has been exhaustion of natural resources, particularly forests.

b. In urban areas local population decline results from the process of urban growth and development, particularly the encroachment of business and industrial areas on residential areas as a city grows.

2. Changes in the concepts concerning what constitutes an adequate and acceptable school program. This factor is manifested in two types of cases:

   a. Small membership. The school program now desired for the children requires so many services and facilities that it can be provided economically only at larger school centers. Therefore, when it is feasible, excessively small schools are consolidated and their buildings abandoned. In Florida schools of small membership are found usually in rural areas.

3. Small sites. Where schools have ample membership, but the sites are small and inexpansible, the kind of program now desired, including numerous outdoor activities, cannot be carried on in a satisfactory manner. On a small site additional building space for a growing membership and additional building facilities for an expanded school program cannot be provided. The building must be abandoned and

replaced at an adequate site if satisfactory facilities are to be provided for a modern school program.

3. Changes in the concepts concerning what constitutes a safe, comfortable and hygienic school building. These changes, together with changes in the kind of activities carried on in the school program, may make a building obsolete. When the building cannot be rehabilitated at reasonable cost to conform to changes in standards for safety, health, and comfort, and to provide adequately for present school activities, abandonment may be the only answer to the problem of providing the kind of facilities and school program desired for the children.
4. Changes in the environment of a school building. Encroachment of industrial and business activities on the location of the school, or the development of a heavily used traffic artery near the building, may create noise and other disturbances which handicap school activities.
5. Changes in the structure of the building through deterioration to the point that it is unprofitable to make repairs. This may be the result of deficiencies in original design, workmanship, and materials, or lack of adequate maintenance and repair, or both.
6. Mistakes in the original planning of the building. Sometimes buildings were located at places where there were very few pupils, or where the population soon declined. These mistakes

were mostly the result of lack of consideration of pertinent facts in planning school buildings; they often grew out of the system of small local school districts.

The operation of these factors in bringing about the abandonment of a school building is affected by other factors, such as the following:

1. Provision of means for rapid and comfortable transportation of pupils to satisfactory school centers. Building of roads and bridges and development of modern transportation equipment makes possible the discontinuance of unsatisfactory school centers in many instances.
2. Necessities for economies in the operation of the school system.
3. Damage to a building by storm or fire.
4. Availability of building space to accommodate pupils from unsatisfactory school centers or buildings. Replacement of a building which is to be abandoned is often dependent on the financial ability of the school system to build more satisfactory facilities.

Implications

Certain implications relating to the planning of new school buildings may be drawn from this study and from the conclusions stated:

1. There is need for most careful planning before any major school building is constructed. Such planning should not be limited to the needs of a local school attendance area. It should take into consideration overall building needs within the whole school system, and should consider long range possibilities.

A desirable kind of planning has been provided in Florida under the school building survey program. However, the necessarily brief time spent in a local school system by a survey staff is not sufficient for adequate planning. Studies by survey staffs should be supplemented by extensive local planning.

Laws, or regulations, should require that at least a minimum amount of pertinent data be considered by local school authorities before any school building is constructed. Because many technical matters are involved, the services of competent consultants are almost always essential. Large school systems could, if necessary, provide necessary consultant services for themselves, but small systems must depend on some central state agency if they are to have adequate help in school plant planning. Authorities believe that the state department of education should provide such assistance in any school system where it is needed.[1]

2. Careful studies to determine trends in population changes should be made in connection with the planning of new school buildings. Economic developments should receive particular attention. Such studies, if properly conducted and prudently acted upon, should help minimize future capital loss through abandonment resulting from population changes.

Through such studies it should be possible to determine with some assurance whether rural populations have become stable in particular cases, or whether trends toward decline will continue. If there is evidence of continuing decline, great caution should be used in deciding how much to build at a new rural school. A good plan might be to build only a central core of a school plant of permanent construction. Part of the facilities might be so built as to have high salvage value, if continued decline leads to disuse in a few years.

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[1] Fred F. Beach, The Functions of State Departments of Education, Chapter II.

In urban areas the school building program should be coordinated with general city planning and zoning. City planning and zoning which is concerned with the best utilization of areas for residential, business, or industrial purposes is now almost universal in urban areas. School buildings in large cities represent a huge investment. Even in times of normal growth there should be an almost continuous building program. It should pay the large urban school systems of Florida to employ permanent staffs charged with the duty of population research and the coordination of school building planning with general city planning. Such research departments exist in school systems of other states, but have scarcely been attempted in Florida. Pertinent data assembled through research, if wisely used by school authorities in deciding on construction of new buildings, should help minimize future losses through population changes. As in rural areas, judicious use of construction having a high salvage value for some facilities in some school plants might be advantageous.

Some of the cases studied suggest that the principle that a school building should be located as near as possible to the geographic center of the area it serves might advantageously be modified in some urban situations. Some urban school attendance areas have expanding business or industrial areas on one side and vacant land for residential expansion on the other side. In such cases it might be well to place a new school building off center on the side away from the expanding business or industrial section. Then as encroachment proceeded and as the residential area expanded on the opposite side, the building would gradually become the center of the attendance area. As the encroachment approached the building pupils could be drawn from the expanding area beyond. Such planning might give a large and expensive urban school building many more years of useful life.

Careful research on urban ecology might make it possible to chart the process of encroachment with considerable precision in some cases. The building could then be placed where on the average during its useful life it would be central for the population it served. For example, an elementary school is planned in an urban area bordered on one side by a growing business section. On the other side is land suitable for residential development. The area to be served has a diameter of about one and a half miles, or fifteen blocks. Studies of the city's growth show that the business section is growing into this attendance area at the rate of one-fourth block per year. The building is planned for a life of fifty years. If the school is located off center twelve blocks from the present edge of the business section, it would take about fifty years for the business section to reach the building. On the average during the fifty years it would have been centrally located. If located centrally when built it would be off center within a few years, and would be surrounded by the business section in twenty-five to thirty years.

3. Abandonment of school buildings resulting from changes and developments in the school program in the future might be minimized by giving consideration in planning new school buildings to probabilities which seem to exist now.

Future developments in the school program seem now to be in the direction of increased services to the children and broader curricular offerings. Additional personnel, building space, and instructional equipment will probably be required. These can be provided economically only where school memberships are substantially large. Therefore, new school buildings should not be planned for small school memberships, except in cases where sparsity of population will always make necessary the maintenance of a small school. Minimum standards for school membership established by good evidence should be disregarded only in exceptional circumstances.

The principle that a school building should be designed to be as adaptable as possible to future changes in the school program has been pointed out repeatedly in recent literature on school plant planning. Design of the building should be such that new rooms are easy to add and economical to build. If the design calls for interior partitions which can be moved economically, rearrangement of space to accommodate possible future changes in school program would be facilitated. Present evidence is that this principle of flexibility in planning a school building can best be attained in a one-story structure with non-bearing walls, and with rooms on only one side of the corridors.

4. A school site of adequate size for a new school building is highly important in minimizing the possibility of early abandonment. A site meeting present standards of adequacy provides considerable assurance of adaptability to membership growth and to future developments in the school program. A site of generous size protects a building against noise and disturbances from encroaching business and industrial activities.

5. There is need for assurance that new school buildings will be designed and constructed to insure structural soundness and economical operation and maintenance. The state department of education should have adequate staff and regulatory power to assure minimum standards of structural design.

The findings of this investigation do not indicate that it might be possible to plan all new school buildings in such a way that all loss through early abandonment may be avoided. Some such loss is probably inevitable. However, careful economic and population studies, location of school buildings on the basis of facts, provision of adequate sites, designing buildings for flexibility, and assurance of sound structural design should make it possible satisfactorily to use many buildings much longer than in the past. Careful consideration of the factors contributing to abandonment when planning a new school building should minimize loss of building values in the future.

APPENDIX A

Florida School Survey Staff Members

Staff members who served on one or more of the Florida school building surveys studied in this investigation are listed below. Position of each person at the time of the surveys is first given, followed by a partial list of other positions held, indicating qualification to serve on a school survey staff. In addition to these staff members, from one to six graduate students served as assistants on most of the survey staffs. Names of persons serving as chairman, co-chairman, assistant chairman, or associate chairman of a survey staff are marked with an asterisk (*).

Don R. Allen, Field Supervisor of Instruction, Florida State Department of Education, now Secondary Supervisor, Lake County Schools.

J. Pope Baird, Consultant in Transportation, Florida State Department of Education, formerly Supervisor of Transportation, Alabama State Department of Education.

T. L. Barrineau, District Supervisor, Agricultural Education, Florida State Department of Education.

Doris Bilger, School Lunch Specialist, Florida State Department of Education.

J. Hartley Blackburn, Superintendent of Public Instruction, Manatee County, Florida.

Leslie J. Brown, Assistant in Finance, Florida State Department of Education.

Orville Calhoun, Assistant in Finance, Florida State Department of Education.

*James T. Campbell, Assistant in Surveys, Florida State Department of Education, formerly Assistant Professor of Education, University of Florida, and principal of public schools in Florida.

*M. W. Carothers (Ed.D. Columbia), Dean of the Graduate School, Florida State University, Tallahassee; formerly Director of Instruction, Florida State Department of Education, and Supervising Principal, Tampa, Florida.

J. K. Chapman, Field Supervisor of Instruction, Florida State Department of Education, now Deputy Superintendent, Florida State Department of Education.

John A. Clegg, County Superintendent of Public Instruction, Flagler County, Florida.

*Samuel F. Clemons, Supervisor of School Plant Planning, Florida State Department of Education, formerly School Building Supervisor, South Carolina State Department of Education (deceased).

William F. Credle, Director of School Plant Planning, North Carolina State Department of Education (deceased).

E. A. Davis, General Supervisor, Dixie County Public Schools, and Supervising Principal, Cross City, Florida. Now member of faculty of P. K. Yonge Laboratory School, University of Florida, Gainesville.

Harris W. Dean (Ed. D. Illinois), Professor of Education, Florida State University, Tallahassee.

C. Lee Eggert, Principal, P. K. Yonge Laboratory School, University of Florida, Gainesville.

Colin English (Ed. D. Columbia), State Superintendent of Public Instruction, Florida State Department of Education.

M. Mitchell Ferguson, Field Supervisor of Instruction, Florida State Department of Education; formerly Supervising Principal, Sebring, Florida.

Thelma Flanagan, Supervisor of School Lunch Program, Florida State Department of Education.

James E. Garland, A.I.A., State School Architect, Florida State Department of Education; formerly Assistant Professor of Architecture, University of Florida, Gainesville.

Robert T. Glenn, Supervising Principal, Perry Public Schools; now Supervising Principal, Tarpon Springs Public Schools.

R. L. Goulding (Ph. D. Peabody), Principal of Demonstration School and Professor of Education, Florida State University, Tallahassee.

*James L. Graham, Director of Administration and Finance, Florida State Department of Education; formerly Supervisor of School Plant Planning.

Leon A. Gray, Assistant Professor of Education, University of Florida, Gainesville.

Joe Hall, Director, Division of Instruction, Florida State Department of Education, now Assistant Superintendent of Instruction, Dade County Schools, Miami.

Sarah Lou Hammond, Elementary Specialist, Florida State Department of Education; now member of faculty, Florida State University, Tallahassee.

S. E. Hand, Director of Adult and Veteran Education, Florida State Department of Education.

Ed. Henderson, Field Supervisor of Instruction, Florida State Department of Education; now Executive-Secretary, Florida Education Association; formerly Supervising Principal, Ft. Myers Public Schools.

H. F. Hinton, Supervisor of Trade and Insutrial Education, Florida State Department of Education.

Eunah Holden, Consultant in Internship and Teacher Recruitment, Florida State Department of Education.

*J. Fred Horn, Supervisor of School Plants, Florida State Department of Education; now Field Representative, U. S. Office of Education; formerly member of staff of Texas State Department of Education.

D. C. Huskey, County Superintendent of Public Instruction, St. Lucie County, Florida.

*R. L. Johns (Ph. D. Columbia), Professor of School Administration, University of Florida, Gainesville; Research and Field Studies Specialist, Florida State Department of Education; formerly Director of Administration and Finance, Alabama State Department of Education.

Miss L. E. Jones, Consultant in School Services, Project in Applied Economics, University of Florida, Gainesville.

William R. Keller, Elementary Supervisor, Orange County Schools, Orlando, Florida.

Forrest Kelley, A. I. A., State School Architect, Florida State Department of Education; formerly Associate Professor of Architecture, University of Florida, Gainesville.

R. Earl Kipp, Director of Secondary Education, Orange County Schools, Orlando, Florida.

Sara M. Krentzman, Consultant in Library Service, Florida State Department of Education; Assistant Dean, School of Library Training and Services, Florida State University, Tallahassee.

Lucy Lang, Assistant State Supervisor of Home Economics Education, Florida State Department of Education.

R. E. Lee (Ed. D. Florida), Assistant in Research and Information, Florida State Department of Education.

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Thomas N. Morgan, Assistant in Finance and Administration, Florida State Department of Education.

*Edgar L. Morphet (Ph. D. Columbia), General Consultant and Coordinator of Surveys, Florida State Department of Education; formerly Executive-Secretary, Florida Citizens Committee on Education; Director of Administration and Finance, Florida State Department of Education; now Professor of Education, University of California, Berkeley.

Roy W. Morrison, Professor of Education, University of Florida, Gainesville. (Deceased).

W. Stewart Morrison, A. I. A., State School Architect, Florida State Department of Education.

Herman O. Myers, Assistant Transportation Consultant, Florida State Department of Education.

Charles S. Partin, Supervising Principal, Starke, Florida, Public Schools.

Ben J. Perloff, Supervisor of Veterans Education, Florida State Department of Education.

E. G. Raborn, Field Supervisor of Instruction, Florida State Department of Education; formerly supervising principal in Florida schools.

F. A. Rhodes (Ed. D. Florida), Specialist in Surveys, Florida State Department of Education.

J. G. Smith, District Supervisor of Agricultural Education, Florida State Department of Education.

Louise Smith (Ed. D. N.Y.U), Consultant, Health and Safety Education, Florida State Department of Education; now member of faculty, Florida State University, Tallahassee.

Jon L. Stapleton, Supervising Principal, Marianna, Florida Public Schools.

A. J. Stevens, Jr., Field Supervisor of Instruction, Florida State Department of Education; formerly Supervisor of Instruction, Jackson County Schools; now Assistant Executive-Secretary, Florida Education Association.

Robert O. Stripling (Ed. D. Columbia), Assistant Professor of Education, University of Florida, Gainesville.

Mildred E. Swearingen, Specialist in Elementary Education, Florida State Department of Education.

A. L. Vergason, Supervisor of School Accreditation, Florida State Department of Education; now Director of Instruction, Hillsborough County Schools, Tampa.

Florence Wagner, Assistant Supervisor of School Lunchroom Program, Florida State Department of Education.

James L. Wattenbarger (Ed. D. Florida), Assistant Professor of Foundations of Education, University of Florida, Gainesville.

J. T. Weisner, County Superintendent of Public Instruction, Nassau County, Fernandina, Florida.

Leonard B. Wheat (Ph. D. Columbia), Professor of Education, University of Florida, Gainesville.

J. B. White (Ph. D. Peabody), Dean of the College of Education, University of Florida, Gainesville.

D. E. Williams, Supervisor of Negro Education, Florida State Department of Education.

Rex Todd Withers, Assistant Supervisor of Home Economics Education, Florida State Department of Education.

J. W. Woodham (Ed. D. Florida), Supervisor of Instruction, Bradford County Schools, Starke, Florida.

Roberta Yoakley, Consultant, Education of Exceptional Children, Florida State Department of Education.

APPENDIX B

Plan of Classification of School Centers Used by Florida Survey Staffs

This classification was made for use in the administration of the Foundation Program Capital Outlay Funds. The classification was determined by the survey staffs findings as to whether a school center was to be maintained, and whether a building should be continued in use.

Permanent Center (C-1).

Center well located to serve a substantial number of pupils for many years in the future, where county board should proceed with such steps as are necessary, including use of any part of the capital outlay portion of the Foundation Program Fund when properly included in the budget, to provide adequate school plant facilities in accordance with recommendations of the survey subject to such amendments as are made necessary by future trends and new developments.

Probably Permanent Center (C-2).

Center which evidence indicates will probably be a permanent center but evidence is not conclusive. Has practically the same status as a C-1 center except status should be reviewed and supporting evidence of need submitted before major construction undertaken. Capital outlay projects specifically recommended by survey report may be undertaken when properly included in the budget.

Probably Temporary Center (C-3).

According to present indications this center will probably be used for a number of years. Foundation Program funds may be used only for necessary lighting, sanitation, safety and heating improvements at such centers. New construction or addition cannot be made at this center from Foundation Program Funds without further study and reclassification.

Temporary Center (C-4).

Center which should be discontinued as soon as adequate facilities can be provided at an appropriate center. If it is not possible to discontinue this center immediately, Foundation Program Funds may be used for lighting, sanitation, safety and temporary heating improvements. Generally speaking, the improvements made at such centers should be largely salvageable when the center is discontinued.

Center to be Discontinued in Immediate Future (C-5).

Facilities are available for the pupils elsewhere and the center should be closed in the immediate future. No capital outlay expenditures from Foundation Program Funds can be authorized for C-5 centers.

1. No capital outlay expenditure should be made for the improvement of a building recommended for abandonment regardless of the classification of the center at which it is located.

2. A center may be reclassified at any time the evidence indicates that a reclassification is necessary. Thus a center designated as C-4 may be reclassified as C-2 if there is a substantial increase in population in the community.

3. If a school is classified as a C-1 center for elementary purposes and as a C-4 center for junior high school purposes, permanent construction should be justified in terms of the need for elementary rather than for junior high school purposes.

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BIOGRAPHICAL NOTE

James Theodore Campbell was born in Litchfield, Nebraska, October 11, 1911, the son of James T. and Lillie Ewalt Campbell, who moved to Florida when he was three years old. He attended the public schools of Zephyrhills, Florida, and entered the University of Florida in 1928. He received the degree of Bachelor of Arts in Education in 1932 and the degree of Master of Arts in Education in 1939.

From 1932 to 1939 he served as teacher and supervising principal in the Zephyrhills Schools. In 1939 he was appointed supervising principal of the Bushnell, Florida, Schools, resigning in 1945 to accept a position at the University of Florida, where he became assistant professor of education.

In 1948 he resigned to take a position with the Florida State Department of Education with the responsibility of supervising the surveys of school building needs made necessary in every county by the Florida Minimum Foundation Program. He participated in school surveys in almost every Florida county, as well as assisting with studies of school building programs at the Guantanamo Bay, Cuba, Naval Operating Base, and in the Virgin Islands. In the latter months of 1950 he served as Acting Director of Administration and Finance of the Florida State Department of Education during the director's illness.

He was married to Dorothy Maxey of Cottage Hill, Florida, in 1934. They have three children, Jean, Mary, and James III.

He is a member of Phi Kappa Phi, Kappa Delta Pi, Phi Delta Kappa, and the National Council on Schoolhouse Construction. He belongs to the First Methodist Church, Gainesville.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of the committee. It was submitted to the Graduate Council and was approved as partial fulfilment of the requirements for the degree of Doctor of Education.

June 9, 1952

C. F. Byers

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